507-5-1

# ANALYSIS OF THE ENVIRONMENT FOR THE RECRUITMENT & RETENTION OF REGISTERED NURSES IN NURSING HOMES

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration

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# ANALYSIS OF THE ENVIRONMENT FOR THE RECRUITMENT & RETENTION OF REGISTERED NURSES IN NURSING HOMES

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October 1987

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration
Bureau of Health Professions
Division of Nursing

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, DC 20402

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# FOREWORD

The Division of Nursing has major responsibility for examining the utilization of nursing resources and for conducting studies of the requirements for and use of nursing personnel in the various health care settings. The factors affecting the staffing, recruitment and retention of nurses are an important aspect of the data needed to provide judgments on the adequacy and availability of nursing staff.

Considerable concern has been expressed about the adequacy of care provided to residents in nursing homes. Yet, only limited information has been available on the environment for the employment of registered nurses in those health care facilities. In order to obtain a data base of value to the analysis of this environment, the Bureau of Health Professions entered into an interagency agreement with the National Center for Health Statistics (NCHS) to collect specific data on nursing personnel in the 1985 National Nursing Home Survey conducted by NCHS. The data collected specifies nurse staffing patterns, and the characteristics, activities and concerns of registered nurses employed in nursing homes. The findings of the study are reported in this document.

The report relates the employment of and characteristics and concerns of registered nurses employed in nursing homes to the characteristics of nursing homes and their residents. It also provides an analysis of a comparison between the employment characteristics of registered nurses in nursing homes and those in other employment settings through an examination of data from the 1984 National Sample Survey of Registered Nurses.

The report should be useful to all those concerned with evaluating and improving the availability of nursing care for residents of nursing homes.

Jo Eleanor Elliott

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Director
Division of Nursing

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# Analysis of the Environment for the Recruitment and Retention of Registered Nurses In Nursing Homes

## I. SUMMARY AND CONCLUSIONS

### A. Introduction and Background

America's population is growing increasingly older, with more than 10 percent of all people now 65 years of age or older. As the proportion of aging individuals has increased, the need for health care or rehabilitation services for this population has grown.

Although the services received by the aged population can be found in a variety of settings, those individuals requiring long-term care are predominantly cared for in nursing homes. Nursing care, by definition, constitutes the major component of services provided in nursing homes and extended-care facilities. Federal regulations for skilled nursing facilities require registered nurses to work as directors of nursing; however, charge nurse positions may be held by LPNs. Although research studies show that a greater number of nurses in a nursing home are associated with improved resident outcomes (IOM, 1986), many nursing homes still rely on untrained and unlicensed nursing personnel to provide 80 to 90 percent of the care while the professional nurses' time is spent on supervisory and administrative duties. In a nursing home, on a given day, the only RN present may be the director of nursing and all patient care may be administered by LPNs and nurse assistants. At the same time, there may be an absence of onsite medical supervision and, frequently, a lack of other professional personnel (e.g., physical and occupational therapists).

Concern over the utilization of RNs in nursing homes, coupled with legislative requirements, led to a demand for a study of nurses and nursing homes. The Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services, participated in the 1985 National Nursing Home Survey (NNHS) through an Interagency Agreement with the National Center for Health Statistics (NCHS). Through this participation, a Nursing Staff Questionnaire (NSQ) was administered to a sample of registered nurses employed by nursing homes for the purpose of obtaining data on the nurses' employment status, role and condition and on their demographic characteristics and educational background. The data from the NSQ, as well as other data collected as part of the NNHS, and data collected through the 1984 National Sample Survey of Registered Nurses (NSSRNs) were the primary data used by the Research Triangle Institute (RTI) (Contract No. 240-86-0090) to analyze the environment for the recruitment, retention, and utilization of registered nurses in nursing homes.

From a review of the literature, postulated models were developed for utilization, recruitment, and retention of RNs in nursing homes. Based on the models, measures of utilization, recruitment and retention were specified and the relationships between independent variables and these dependent measures were postulated. Tabular and regression analyses were undertaken for the purpose of describing the environment and gaining insights into the relationships that exist between dependent and independent variables.

## B. Utilization of Registered Nurses in Nursing Homes

Nursing homes employed approximately 8 percent of the 1.5 million RNs working as nurses in the U.S. in 1984. Hospitals were the primary employer of nurses, with more than two-thirds employed in that setting. The remainder were primarily employed in ambulatory care, nurse education, public/community health, occupational health, student health, or were self-employed.

### 1. Differences Between Nurses Employed in Nursing Homes and Other Settings

Nurses employed in nursing homes were considerably older than nurses working in hospitals. Consistent with their older age, they were also less likely to have young children at home than hospital nurses. They were more likely to have never been married than nurses employed in hospitals.

Nursing home RNs had many more years since graduation than nurses employed in hospitals, undoubtedly reflecting the underlying age difference. Almost twice the proportion of nursing home RNs had 15 years or more since graduation from their basic nursing education program. More than 60 percent of nursing home RNs were diploma-trained. That was about half again as many diploma-trained nurses as were employed by hospitals.

Over forty percent of the RNs employed in nursing homes were working part-time. This was about one-third greater than the proportion of hospital nurses employed part-time. Registered nurses employed in nursing homes full-time earned weekly salaries that were considerably less than nurses working full-time in hospitals. Nearly 60 percent of RNs employed in nursing homes earned less than $400 per week, but less than half that proportion of hospital nurses earned that little.

Regardless of employment setting, most nurses filled staff nurse or general duty nursing positions. However, more than one-third of nursing home nurses reported administration and supervision as their primary position, a proportion more than three times as high as for hospital nurses.

2. Work Activities of Nursing Home Nurses

The assignment and supervision of nursing staff, and the observation and charting of patient's condition were the two activities that nursing home nurses reported doing most often. Nearly 65 percent of the nurses reported that they were always involved in doing them. For a third activity--administering routine therapies--more than half of the nurses employed in nursing homes reported they were always involved.

With respect to activities that nursing home RNs reported they were seldom or never involved with, two stood out. Nurses were least involved in the planning and provision of recreational programs for patients. More than three-fourths of nursing home RNs said they seldom or never were involved with that activity. The second activity that a majority of nurses reported being seldom or never involved with was giving personal care to patients. More than half of nursing home nurses gave this response.

When their involvement with these activities was examined in light of their educational preparation and nursing experience, greater involvement with these work activities was generally reported by nurses with less work experience and those with associate degrees or diplomas. The biggest differences were between nurses with less than five years of experience and those with 30 or more years.

3. Nursing Homes as a Context for RN Employment

Nursing homes were described by their ownership, affiliation, certification, size, the number of services offered, the minimum RN requirements in their state and physician availability. They were predominantly proprietary, independent, and had less than 100 available beds. Nursing homes overwhelmingly participated in government programs (75 percent) and were usually certified as SNFs, ICFs or an SNF-ICF dual facilities. State requirements for RN staffing levels were often less stringent than the federal requirements. This existed mostly for ICFs, but there were some states in which there were no requirements for RNs in either SNFs or ICFs.

Nearly half of the nursing homes reported having a physician available on the premises, but only at scheduled times. Another 30 percent of nursing homes reported having arranged for a physician to be on-call.

The majority of registered nurses were employed in proprietary nursing homes. Nearly half of the RNs were employed by independent nursing homes rather than by a nursing home chain or a government facility. More than three-quarters were employed in SNFs or in facilities that were ICFs and SNFs combined. Facilities of 100 or more beds employed two-thirds of the RNs. Nursing homes in states requiring at least one full-time RN employed more than 60 percent of the registered nurses. Most RNs were employed in facilities where a physician was available on the premises but only at scheduled times.

The RNs employed in nursing homes were usually middle aged. They were often staff nurses responsible for supervising other nurses and administering patient care. The older age of these nurses reflected their long years of experience, with 70 percent having worked for 10 or more years in the nursing field. Their diploma preparation is probably a reflection of their older age also, from a time when diploma programs were the predominant type of nursing education. Most of the nurses' salaries fell at the low end of the RN salary scale.

### 4. Tabular Analysis of RN Utilization

The tabular analysis investigated two measures of RN utilization in nursing homes. One has been referred to as intensity. The intensity of RN utilization was operationally defined as the amount of registered nurse time available per patient per day. The second measure has been referred to as the level of RN employment. It was operationally defined as the ratio of the number of full-time equivalent registered nurses to the number of full-time equivalent nursing personnel (RNs, LPNs, aides and orderlies). The results for each one are summarized separately, starting with the intensity of RN utilization.

Nearly 40 percent of the 19,070 nursing homes in the U.S. had less than one-tenth of an hour (six minutes) of RN time available per patient per day and nearly 60 percent of these reported no registered nurses at all. Just under 25 percent of the 1.5 million nursing home residents were patients in such facilities. These nursing homes employed less than five percent of the almost one hundred thousand RNs employed in nursing homes.

Many nursing home characteristics were associated with the intensity of registered nurse utilization. Registered nurses were used least intensively in nursing homes that were proprietary; independent; small (50 available beds or less); offering less than 11 of the commonly available patient services; not certified by Medicare or Medicaid as an SNF or ICF; with less than one FTE nurse, less than three-tenths of an hour of LPN time, and less than half of an hour of aide time available per patient per day; with no state RN requirements for nursing homes; and with a physician not available on the premises but available on call. On the other hand, RNs were more intensively used in nursing homes that were nonprofit; part of a large chain; large (150 available beds or more); offering 15 or more of the commonly available services; certified as a skilled nursing facility (SNF) by the Medicare or Medicaid program; with 10 or more FTE registered nurses, enough LPNs and aides to average seven-tenths of an hour or more of LPN time, and 2.2 hours or more of aide time available per patient per day; with state requirements for a registered nurse on all shifts; and with a physician available on the premises at times during weekday hours.

Two patient characteristics were strongly associated with the intensity of RN utilization in the nursing home in which the patients resided. Patient age was directly related to the number of RN hours available per patient per day. A larger proportion of patients under 65 years of age--39 percent--were residents in nursing homes characterized as having less than one-tenth of an hour of RN time available per patient per day. This was in contrast to the proportion of patients 85 years of age and older--19 percent--that resided in nursing homes with so little RN time available per patient per day.

The second patient characteristic related to the intensity of RN utilization in the nursing home in which they resided was physical health status. Patients described as being in excellent health were much more likely to be patients in nursing homes with less than one-tenth of an hour of RN time available per patient per day than was true of patients not in as good health. More than 41 percent of patients in excellent health, but only 24 percent of patients in good to poor health were patients in nursing homes with less than one-tenth of an hour of RN time available per patient per day.

Nurse characteristics were only weakly related to the amount of RN time available per patient per day. There was a slight tendency for larger proportions of older nurses, nurses with bachelors degrees not in nursing or with masters or doctorate degrees, nurses employed in general nursing positions, and nurses earning $500 or more per week to be employed by nursing homes characterized by a high intensity of RN utilization. To keep these results in proper perspective, it is important to recall that only about 25 percent of nurses were 55 years of age or older, only 7 percent had a nursing education preparation consisting of a bachelor's degree in a nursing related area or a masters or doctorate degree, and only 11 percent reported a weekly salary of $500 dollars or more. On the other hand, more than 58 percent of the registered nurses employed in nursing homes worked in general nursing positions.

As one would expect, many of the same nursing home, current resident and nurse characteristics were also related to the level of registered nurse employment. Overall, nearly 60 percent of the 19,070 nursing homes in the U.S. had a nursing staff composed of less than 10 percent RNs, and half of these employed no registered nurses at all. These nursing homes contained just about half of the nearly 1.5 million nursing home residents, but employed less than 20 percent of the almost one hundred thousand registered nurses working in nursing homes.

Many of the same nursing home characteristics associated with intensity of RN use were also associated with the level of registered nurse employment. Registered nurses were employed at the lowest level in nursing homes that were proprietary, small (50 beds or less), offering fewer than 11 of the commonly available patient services, not certified by Medicare or Medicaid as an SNF or ICF, with less than one FTE registered nurse, without any state RN requirements for nursing homes, and with physician availability limited to one being on-call. RNs were employed at the highest level in nursing homes that were nonprofit, large (200 beds or more), offering 15 or more services, certified as skilled nursing facilities (SNFs) by the Medicare or Medicaid program, with 10 or more FTE RNs, with state requirements for a registered nurse on all shifts, and with a physician available on the premises at all times during weekdays.

The only patient characteristics related to the level of RN employment in the nursing home in which the patients resided were race and source of payment for the first month's stay. White nursing home residents were much more likely to be patients in nursing homes whose nursing staff was composed of at least 10 percent registered nurses than were current residents of other races. When Medicare was the source of payment, patients tended to reside in nursing homes with a higher level of RN employment.

Regarding the relationship of nurse characteristics to the level of RN employment, nurses with associate degrees were slightly more likely to be employed in low nursing level facilities, whereas nurses working in general nursing positions were more often employed in nursing homes with a high level of RN employment.

5. Regression Analysis of RN Utilization

The most striking result of the RN utilization regression analysis was the difference between proprietary nursing homes and nonprofit nursing homes or governmental nursing homes in the number of full-time equivalent RNs employed. This difference was between 1 to 3 FTEs depending on which other nursing home characteristics were included in the model. The state minimum RN requirement was also associated with the number of FTE RNs. In addition, the percent of patient days paid for by Medicaid had a strong downward effect on the number of full-time equivalent RNs employed by nursing homes. With respect to RN staffing per 1,000 inpatient days, only the state minimum RN requirement and the number of admissions per bed increased the intensity of RN utilization.

C. Retention of RNs by Nursing Homes

1. Nursing Home Retention Rate

Based on data from the National Sample Survey of RNs (NSSRN), an estimated 72.4 percent of RNs employed in nursing homes had the same employer 1 year earlier. This is over 9 percent lower than the 81.5 percent retention rate for hospitals. Based on the data from the NNHS, 77.9 percent of the nurses had worked in the same facility for one or more years. At least part of the difference between the 1-year retention rate from the two data bases occurs because in the NSSRN the nurses had to be employed as RNs by the same employer, while in the NNHS the nurses only had to be employed in the same facility but not necessarily as RNs. For this reason, the NSSRN data base appears to be better for assessing the 1-year retention. It also provides the opportunity to compare the retention rate across settings, whereas the NNHS does not. The NNHS data base must be used for the 5-year retention rate since it is not available from the NSSRN data base.

The 5-year retention rate was 40.8 percent. These low 1- and 5-year retention rates mean that nursing homes either had a sizable turnover rate, or a large expansion in the number of RNs they employed, or both. Both RN turnover and staff expansion result in hiring additional RNs. The more new nurses, the lower the proportion of nurses who have been retained for 1 or 5 years. Staff expansion can be due to the industry's growth (more patients and thus more beds and nursing homes) or to an increase in the intensity of RNs' nursing care (more RN time per patient day). It is likely that both turnover and staff expansion contributed to the relatively low proportion of RNs who had been with a facility for at least 1 year. Staff expansion between 1980 and 1984 was 13.2 percent or approximately 3 percent a year. With over 20 percent of the staff having been hired within the previous year, staff turnover obviously must have accounted for most of the new hires.

The retention rate varies by the nurses' demographic characteristics. The younger nurses had a lower retention rate than the older nurses. The 1-year retention rate was 50.8 percent for nurses under 35 years of age and 80.5 for nurses 55 to 64 years of age. The 5-year retention rate was 18.9 percent for those nurses under 35 years of age and 53.4 for those between 55 and 64 years of age. Some of the younger nurses could not have stayed with an employer for the specified number of years because they had not been licensed that long. However, when the retention rate was assessed for nurses with different numbers of years since graduation from their basic nursing education program, the 5-year retention rate was still only 23.9 percent for nurses who had graduated 5 to 9 years earlier. Apparently then, younger nurses who were licensed more recently had a much lower retention rate than did older nurses who had graduated much earlier.

Nurses whose highest educational preparation was a diploma had the highest retention rate, and associate degree nurses had the lowest. The 1- and 5-year retention rates for diploma-prepared nurses were 78.3 percent and 51.5 percent respectively. For associate degree nurses, the corresponding retention rates were 58.4 percent and 25.0 percent. The RNs whose highest educational preparation was a bachelor's in nursing had a 5-year retention rate of 27.5 percent.

The retention rates for nurses with different educational preparations may reflect the changing patterns of RN education. The annual number of diploma graduates has been steadily decreasing over the past years, and the annual number of graduates with associate degrees has been increasing. The annual number of nurses graduating with a bachelor's degree in nursing has been relatively constant over the last decade. The average age of diploma nurses was higher than that for associate degree nurses because so few new graduates are diploma-trained as compared to those who enter nursing with associate degrees. Since the older nurses had a higher retention rate, one would expect diploma nurses to have the highest retention rate, and associate degree nurses the lowest. This was what the data showed; thus, the data on age, years since graduation, and highest educational preparation were consistent.

The retention rate increased with average weekly salary. The 1-year retention rate went from 64.6 percent for nurses earning under $300 per week to 83.0 percent for those earning $500 or more per week. The 5-year retention rate was 26.3 percent for nurses earning less than $300 per week and 49.6 percent for those earning $500 per week. From the data, it was not possible to determine whether the nurses with larger salaries were more likely to be retained or if nurses who stayed longer earned more money.

The 5-year retention rate increased with the number of different types of continuing education (CE) courses related to nursing home care taken by the nurse. This could be interpreted in at least two ways. Taking the CE courses reflected the nurse's prior commitment to caring for the elderly and they simply wanted to improve their knowledge and skills in order to provide better care, or by taking the courses the nurses felt more competent to care for the elderly in nursing homes and thus stayed longer.

Nurses who were employed elsewhere, in addition to their nursing home job, had a lower retention rate than did nurses who did not have another job. The 5-year retention rate was 24.1 percent for nurses who had other employment and 43.6 percent for those who had only a nursing home job. This "other employment" may have been either their primary or secondary job. An estimated 71.3 percent of the nurses with other employment who reported the number of hours they worked, worked less than 35 hours per week at their job in the other setting. An estimated 66.9 percent worked less than 24 hours per week at their other job. Thus, nurses who have a job in addition to their nursing home employment are primarily working at the other job part-time.

The nurse retention rate varied with the number of facilities in a nursing home chain. Nurses employed in independent facilities had a significantly higher retention rate than did nurses in medium (10 to 99 facilities) or large (100 or more facilities) chains. The 5-year retention rate was 43.8 percent for nurses in independent facilities, 30.8 percent for nurses in medium sized chains, and 33.6 for nurses in large chains. Apparently, the turnover rate and staff expansion are less in the independent facilities then they are in the medium to large chains, or both. The data supported both hypotheses.

Nurses employed in government-owned facilities had a higher retention rate than those employed in proprietary facilities. The rate was 49.2 percent for nurses employed in government facilities and 37.5 percent for those in proprietary facilities.

### 2. Comparison of Retention Rates in Nursing Homes and Hospitals

As stated before, in comparison to hospitals, nursing homes had a lower 1-year retention rate. The rates were 72.4 percent for nursing homes and 81.5 percent for hospitals--a 9.1 percent difference. This difference is greater for certain nurse populations. For example, the 1-year retention rate for nurses under the age of 35 was 50.8 percent for nursing homes and 76.8 percent for hospitals--a 26.0 percent difference. Hospitals have essentially one-half of their nurses in this age group (50.4 percent), and nursing homes only have 22.3 percent of their nurses who are under 35 years of age. It appears that hospitals have had more success than nursing homes in retaining young nurses.

A large difference can be observed between the retention rates of nursing homes and hospitals for nurses who graduated fewer than 5 years earlier. The hospitals' 1-year retention rate of 63.4 percent for this recently licensed population was almost twice that of nursing homes (32.4 percent). The difference in retention rates between nursing homes and hospitals is still large for those nurses who completed their basic nursing education 5 to 9 years earlier. This 1-year retention rate was 65.7 percent for nursing homes and 83.1 percent for hospitals--a 17.4 percent difference. The retention rate of nurses who had been licensed within the previous 9 years was much less for nursing homes than it was for hospitals. Because age and the number of years since graduation are highly related, they indicate the same effect on retention.

Although hospitals had a higher retention rate than nursing homes did for all categories of educational preparation, this differential was particularly large for associate degree nurses. The retention rate for associate degree nurses in nursing homes was 58.4 percent, and it was 78.5 percent for nurses employed in hospitals--a 20.1 percent difference.

The retention rate was essentially the same for nurses employed by nursing homes and those employed in settings other than nursing homes and hospitals. Some differences were observed between different populations of nurses, but these were smaller than those observed with hospitals.

The above discussion indicates that nursing homes were less successful in retaining RNs than were hospitals. This is particularly true for the nurses who graduated fewer than 5 years before the survey (younger nurses), and nurses with an associate degree.

### 3. Factors Important to Retention

To find out what would make a nurse want to stay at a facility, the RNs were asked to indicate the importance of 45 factors to retention. Among the highest-rated factors were those associated with the benefits provided by the nursing home. These included hospitalization, medical/surgical care, and dental insurance at no cost to the nurse or at least partially paid for; a graduated vacation plan that varied according to length-of-service; and a retirement plan offered at no cost or at least partially paid for.

Salary-related factors were also considered important. The salary factors that were rated as being very important by the largest proportion of nurses were having a graduated salary plan which increased according to length-of-service and merit, and a pay differential for holiday and weekend work. The importance of the amount of the salary was not included as one of the factors rated by the nurses, thus its importance cannot be assessed in relationship to the other factors.

The nurses also indicated that working conditions were important to inducing a nurse to stay employed in a nursing home. The most highly-rated working conditions were having a well-equipped facility with functional nursing units, providing a comprehensive orientation program for newly hired RNs, and providing in-service education.

If nurses would in fact respond to what they said was important to retention, then nursing homes could improve nurse retention by making their operations conform to what the nurses indicated as being important to retention; i.e., a nursing home could reward an RN with a good benefit package, provide her/him with a graduated salary plan based on length-of-service and merit, and offer a differential salary for holiday and weekend work. The provision of a good working environment by a nursing home was equally important.

Because the study did not obtain information on the actual benefits, salary, or work environment provided by nursing homes, it was not possible to assess the extent to which they already provide the things considered important by the nurses. If such information had been obtained, it would have been possible to determine whether retention was in fact better in nursing homes providing enhanced benefits, salary and working conditions.

### 4. Regression Analysis of Retention

This portion of the study considered the proportion of RNs who were currently working in a nursing home that had been employed by that same home for at least 5 years. It was found that a higher proportion of diploma trained RNs had been in the same facility for at least five years than RNs with other types of educational preparation. Also, RNs with geriatric training were more likely to have a longer tenure than those without geriatric training. In addition, a smaller proportion of RNs with other employment had been employed by the same nursing home for at least 5 years. Several of the measures of other staffing (in full-time equivalents per 1000 inpatient days) were statistically significant. Higher levels of staffing for RNs, housekeeping, and other personnel were associated with an increased proportion of RNs who had been in the same facility for 5 or more years. On the other hand, higher LPN/LVN staffing was associated with a reduced proportion.

## D. Recruitment of RNs by Nursing Homes

Recruitment of RNs by nursing homes was assessed by describing the characteristics of nurses who were employed less than 1 year by a nursing home. The NSSRN permitted comparisons to be made of the new hires among the different settings. The factors the nurses rated as being important to recruitment provided information for the assessment as well.

### 1. Nursing Home Recruitment

The majority of nurses who were recently hired by nursing homes were employed in nursing elsewhere during the prior year. The next most prevalent group was nurses who were licensed but not employed prior to their nursing home employment. Nurses not previously licensed represented the smallest proportion of recently hired nurses. Because of the difference in the way the data were collected between the two surveys, the results are not equivalent, although they are supportive. Some of the difference is associated with whether the nurses worked as RNs or as LPNs in their previous job. The NSSRN data were based on nurses being employed as RNs a year earlier, while the NNHS data only asked if they were employed in "nursing". Another difference is that the NSSRN data were based on the nurse's status one year earlier, while the NNHS data were based on their status immediately prior to their present job. These differences should be remembered in assessing the data.

From the NSSRN, it was found that 60.8 percent of the new nurses were employed elsewhere as RNs a year earlier and that 22.4 percent were not employed in nursing although they were licensed. The remaining 16.8 percent of recently hired nurses were not licensed a year earlier. Data from the NNHS indicated that 72.1 percent were working as nurses in another facility immediately prior to taking the nursing home job. An estimated 14.7 percent were not employed in nursing just before their current job, although they had been employed in nursing earlier. For 10.6 percent, the nursing home employment represented their first job. The 72.1 percent of nurses who were employed elsewhere in nursing were previously employed in other nursing homes (31.1 percent), hospitals (28.3 percent), and other settings (12.5 percent). The 31.1 percent (or 6,414 nurses) recruited from other nursing homes represent 6.4 percent of all the nurses employed in nursing homes, while the 28.3 percent (or 5,880 nurses) recruited from hospitals represent less than 1 percent of nurses employed in hospitals. Obviously, hospitals are losing only a small percentage of their nurses to nursing homes.

Using data from the NNHS, an estimated 14.7 percent of the nurses who had been employed in nursing homes for less than 1 year were not employed in nursing prior to their nursing home employment. This percentage is significantly less than the 31.1 percent of the RNs who had been employed in a facility for 5 or more years who indicated that they had not been employed in nursing prior to their nursing home employment. That is, 5 or more years ago, nursing homes were hiring more nurses that were not employed in nursing than they did 1 year prior to the study. Apparently, nursing home recruitment has shifted away from hiring nurses not previously employed in nursing to new graduates and RNs employed elsewhere in nursing.

Of the nurses recently hired by nursing homes, approximately two out of five were under 35 years of age. Although a large proportion of the recent hires were under 35 years of age, most were older; thus, nursing homes are hiring older nurses.

About two of five new employees were diploma-prepared nurses, with the proportion of new nurses with associate degrees being almost as large. Nurses with a baccalaureate or advanced degree in nursing or a nursing-related field accounted for the remaining recent hires. If this hiring trend continues and the nurses are retained, nursing homes in the future will have a larger proportion of associate and baccalaureate degree nurses and a smaller proportion of diploma-prepared nurses.

### 2. Comparison of Recruitment in Nursing Homes and Hospitals

When comparing new employees in nursing homes with those in hospitals, similarities and differences were observed. For both settings, approximately 55 percent of new employees were employed elsewhere during the prior year. Hospitals, however, hired a larger proportion of nurses who were not previously licensed than did nursing homes. Hospitals also tended to hire a larger proportion of nurses under 35 years of age and a larger proportion of RNs with a baccalaureate in nursing than did nursing homes. A larger proportion of nursing homes' new employees went into supervisory positions than did recent hires by hospitals. A larger proportion of the nursing home new employees were in the lower salary groups than were hospital nurses. This was true even though the nursing home new employees tended to be older and more likely to go into a supervisory position.

Settings other than nursing homes and hospitals tended to hire a larger proportion of nurses who were previously employed elsewhere in nursing (70.5 percent) than did either nursing homes or hospitals. They also hired very few new graduates (4.2 percent).

### 3. Factors Important to Recruitment

The factors that nurses indicated as being important to recruitment were, in general, the same as those rated as being important to retention, with the exception that the two factors ("Pay differential for night shift" and "Graduated salary plan with increases according to length of services") replaced dental insurance and retirement plan factors in the top 10 factors that were rated as "very" or "all" important by the nurses. Therefore, the steps that nursing homes should take to retain nurses are essentially the same ones they should take to recruit the nurses.

### 4. Regression Analysis of Recruitment

In the regression analysis, many of the same variables that were found to be related to retention of nurses were also related to recruitment, although their effects worked in the opposite direction. Older RNs and those with more years of experience were associated with a lower proportion of RNs having worked at the same facility less than one year. Nurses with an associate degree, a B.S. in nursing, or a degree other than Master's in nursing worked at facilities with a higher proportion of RNs who had worked at the facility less than one year than nurses with a diploma. Specialists, supervisors, and persons with other positions worked in the facilities with a lower proportion than those in general nursing. The number of full-time staff equivalents per 1000 patient days was also related to recruitment; the number of RNs employed tended to decrease the ratio, and the number of food service and LPN/LVN staff increased it. A higher ratio of deaths to discharges at the facility and higher RN weekly salaries were associated with facilities having a lower proportion of RNs who had worked there less than one year.

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# II. INTRODUCTION

## A. Introduction and Background

The Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services participated in the 1985 National Nursing Home Survey (NNHS) through an Interagency Agreement with the National Center for Health Statistics (NCHS). Through this participation, a Nursing Staff Questionnaire (NSQ) was administered to a sample of registered nurses (RNs) employed by nursing homes in order to acquire data on the nurses' employment status, role, and conditions, and on their demographic characteristics and background. These data, along with facility and resident data also collected in the survey, provide information useful for gaining a better understanding of RNs employed in nursing homes and how they are used.

The Division of Nursing, in fulfilling its policymaking and legislative responsibilities, awarded a contract (Contract No. 240-86-0090) to the Research Triangle Institute (RTI) to analyze these and other data in order to obtain information on nurse utilization and factors affecting recruitment and retention of RNs in nursing homes. This report documents the conduct of this study. In performing this study, data from other data bases, such as the 1984 National Sample Survey of Registered Nurses and the Area Resource File, were used as appropriate.

The general approach used in conducting the study was to review the literature in order to identify environmental, nursing home, and nurse factors that appear to affect the recruitment, retention and utilization of RNs in nursing homes. This review of related research is presented in Section III.A. Based on this body of literature, models were developed that postulated relationships between the recruitment, retention and utilization of RNs in nursing homes and influencing factors, be they environmental or related either to nursing homes or nurses. These postulated models are discussed in section III.B.

Section III.C. is a discussion of the general analytical approach that was used to investigate the data that were available to this study and relevant to the postulated relationships. Section IV presents and discusses the findings from descriptive and multivariate analyses.

B. Discussion of Data Bases

In this study, data from two surveys were used to conduct most of the analyses. These were the 1985 National Nursing Home Survey and the 1984 National Sample Survey of Registered Nurses. These two data bases are described in the following subsections. In addition to these two surveys, data on the number of hospital beds in a county were obtained from the Area Resource File (DHHS, 1984) and the minimum requirements for RNs in nursing homes were obtained from the state's nursing home legislation, reports summarizing the state requirements (NGS, 1986; and AHCA, 1984), and telephone discussions with state authorities.

1. 1985 National Nursing Home Survey

The 1985 National Nursing Home Survey (NNHS) was a sample survey of nursing and related care homes in the 48 contiguous states and the District of Columbia. The sample was based on the nursing and related care homes included in the 1982 National Master Facility Inventory (NMFI) Survey (DHHS, 1965) and supplemented by homes identified by the Agency Reporting System (DHHS, 1968), the 1982 Complement Survey (Shimizu, 1983), and hospital-based facilities certified by the Health Care Financing Administration. The final sampling frame included 20,749 nursing and related care homes with three beds or more and providing nursing or personal care services to the residents. The facility sample included 1,220 facilities; data from 1,079 of these facilities were on the file for inclusion in the analyses.

Six questionnaires were used to collect data in the survey. These were:

- Facility Questionnaire
- Nursing Staff Questionnaire
- Current Resident Questionnaire
- Expense Questionnaire
- Discharged Resident Questionnaire
- Next-of-Kin Questionnaire

[illegible] analyses conducted in this study primarily used data collected through the Facility, Nursing Staff and Current Resident Questionnaires.

The Nursing Staff Questionnaire was administered to a sample of RNs that worked in the sampled nursing homes. A maximum of four RNs were selected from a facility. Some of the facilities did not have RNs; thus none could be selected from these facilities. Because the sample frame was based on nurses within nursing homes, the nurses with other employment may be reporting on their primary or secondary job. In the analysis RTI used 2,672 nurses who were employed by the nursing homes.

The Current Resident Questionnaire was completed on a maximum sample of five people currently residing in a sampled facility. The analyses conducted by RTI were based on a sample of 5,243 residents.

Different data collection procedures were used for collecting the data. The Facility, Current Resident, and Discharged Resident Questionnaires were primarily completed using personal interviews. Although the Current Resident and Discharged Resident Questionnaires were completed as personal interviews, they were not with the resident or patient; they were with a person knowledgeable of the case. The Nursing Staff Questionnaire was self administered, while the Expense Questionnaire was left for the nursing home to complete and to return by mail. The Next-of-Kin Questionnaire was completed through a computer assisted telephone interview.

In performing the analyses, different subpopulations were used. These were as follows:

- RNs on facility's regular payroll, i.e., they were not employed under a special contract arrangement or working in the facility through supplemental (temporary) employment services.
- RNs on facility's regular payroll who were considered full-time employees.
- All RNs on the file including contract and temporary employment service nurses.
- All responding nursing homes on the file.
- Proprietary and nonprofit nursing homes.
- All current residents on the file.

Copies of the Facility, Nursing Staff, and Current Resident Questionnaires are included in Appendix A-1.

### 2. 1984 National Sample Survey of Registered Nurses

The National Sample Survey of Registered Nurses (NSSRN) is conducted periodically and is based on all individuals who have a current license in the United States to practice as a registered nurse. The sample frame is developed by obtaining the license files from the 50 states and DC. Procedures are implemented to identify and adjust for RNs who are licensed in multiple states.

In the 1984 survey, after adjustments were made for duplicate licenses and ineligible persons, 40,022 RNs were in the sample of which 31,913 responded. RTI's analyses were based on the 25,294 RNs who were employed in nursing within the United States.

The data were collected through the use of a mail questionnaire. Multiple followup contacts were made in order to obtain a response rate of approximately 80 percent.

The data collection instrument requested information on the nurse's education, employment status, demographic characteristics and licensure situation. Of particular importance to this study was the RNs employment setting. This permitted making comparisons of RNs across settings. A copy of the data collection instrument is included in Appendix A-2.

The populations used in analyzing the NSSRN were:

- All RNs employed as RNs in the U.S. in 1984. This included contract nurses and nurses employed through temporary employment services.
- All RNs employed as RNs in the U.S. in 1984 who were considered full-time employees.

Both the NSSRN and the NNHS provided estimates of the number and characteristics of RNs employed in nursing homes; however the estimates differed in several significant ways. First, there was a time difference of 1 year. Second, the NSSRN covered all 50 states and D.C., while the NNHS included only the 48 contiguous states and D.C. (Alaska and Hawaii were excluded). Third, the sampling frames were different. The NSSRN sampling frame included all nurses licensed as RNs in the U.S., while the NNHS nurse sample was selected from a frame consisting of nurses working in a sample of nursing and related care homes. Fourth, the sampling procedures used for selecting the two samples were very different. These differences between the two surveys contributed to discrepancies in the estimates derived from the two data bases.

# III. RELATED RESEARCH AND STUDY APPROACH

## A. Related Research

### 1. Introduction

A search of the literature revealed a relatively small number of prior studies that bear some relationship to the present study. These studies are summarized below. Abstracts of studies that were particularly relevant are included in Appendix B. One goal of this study is to add to existing knowledge with a quantitative analysis of the data from the 1985 National Nursing Home Survey and the 1984 National Sample Survey of Registered Nurses.

A computer literature search of medical, nursing, and health policy journals, government reports and dissertations was conducted in order to identify appropriate materials. Also, library research was done to check for the most recent available literature, and the bibliographies of acquired documents were reviewed and pertinent references noted. Additionally, consultants and individuals in relevant organizations were contacted to identify what they considered to be relevant documents.

### 2. Importance of RN's in Nursing Homes

Nursing care constitutes the principal type of care needed by residents of nursing homes. Nursing services within these facilities vary in the intensity and amount required by eligible residents. Some residents require short term intensive nursing and rehabilitative services. The goal for these patients is to be rehabilitated and to return home. Others are there for short term treatment of acute or terminal illness and die either in the nursing home or shortly after leaving (IOM, 1985). Long term residents present a spectrum of care requirements ranging from those who are relatively independent and require only modest amounts of care to those who are physically and often mentally disabled and need assistance in all activities of daily living (IOM, 1985). In both groups, but primarily the latter, there are patients who are cared for at the nursing home until death.

Providing high quality care to the residents of nursing homes requires ongoing assessment and planning of care by professionally trained staff. Hays (1977) found in his study of 100 superior nursing homes that they had a higher percentage of both RN's and other health professionals, e.g., therapists and social workers. They tended to staff full-time physicians and offered in-service education to personnel and often were associated with nursing and medical schools as training sites. Almost all of the superior nursing homes provided care based on a functional rehabilitation model (also called therapeutic) rather than a custodial care model. According to the American Nurses Association (ANA, 1975) "the difference between professional and nonprofessional nursing care is often the difference between therapeutic and custodial care."

Professional nursing care describes care provided by a nurse with sufficient training and skills to properly assess, plan for the care of, and intervene on behalf of the resident patient. A registered nurse (RN) typically has obtained this level of preparation. Unlike the hospital or other ambulatory settings, the physician usually is not on the premises on a continuous basis (e.g., he may visit the patients in the nursing home once a month); thus the responsibility for monitoring a patient's progress, detecting changes in health status, and initiating appropriate treatments, is that of the nurse in charge of the patient.

In spite of the importance of the RN in providing care for the nursing home patient, there is an understaffing of RN's in long-term care facilities (ANA, 1975). In 1980, the 23,045 nursing homes and extended care facilities providing care for over 1.3 million patients, employed approximately 700,000 nursing personnel. Three-fourths of these employees were nurse's aides. Registered nurses comprised 12 percent of the nursing personnel (DHHS, 1984B).

Some experts predict the need for an additional 1 million to 1.5 million nursing home beds by the year 2000 based on current utilization, prior rates of increase in utilization, and estimated rates of dependency among the elderly (Hawes and Phillips, 1986). If the reported understaffing trend of nursing personnel in nursing homes continues, nursing homes will face an even greater shortage of RNs in the future.

### 3. Utilization

Federal regulations designate two types of nursing homes: Skilled Nursing Facilities (SNF's) and Intermediate Care Facilities (ICF's). The minimum staffing standards for SNF's include:

- 24-hour service by a licensed nurse with an RN on duty at least during the day shift, 7 days a week
- Director of Nursing is an RN
- Charge nurse is a licensed nurse

ICF standards include:

- An RN or LPN to supervise health services on a full-time basis 7 days/week
- If the supervisor is an LPN, the facility must have a contract with an RN at least 4 hours/week for consultation.

Facilities must meet Federal standards if they are certified by Medicare or Medicaid. The state licensure laws apply to all facilities whether or not they are certified by Medicare or Medicaid and set the minimum standards for licensure. States can give waivers to nursing homes which allow them to operate at less than the minimum standards of the law. A survey of the 50 states and the District of Columbia showed that 18 states have minimum standards for SNF's that are lower than the Federal requirements (NGS, 1986; AHCA, 1984; and Gower, 1987). In 20 states, the RN staffing requirements are based on the nurse/bed ratio. For example, a state might specify that in a facility with 30 or less beds, the Director of Nursing is the only RN required to be on the staff, but in facilities with more than 30 beds an additional RN must be part of the staff. Ten states require a registered nurse on duty around the clock for all sized facilities. Four states require an RN around the clock above a minimum bed capacity.

In 1984, the average ratio of RN's to patients was 4.5/100. Regional differences were noted in the nurse/patient ratios from a low of 1.5 in the West South Central to a high of 6.8 in New England (DHHS, 1984). Professional nursing care in a skilled nursing facility (SNF) was found to be provided for an aggregate of 12 minutes in a 24 hour period compared to 2.5 hours for an average hospital patient. In intermediate care facilities (ICF), 7 minutes of registered nurse time was provided (DHHSB, 1984).

The two types of nursing homes--SNF and ICFs--are supposed to serve patients with different types of needs. The federal Medicaid SNF and ICF regulations are premised on a recognition of differences in the patients' need for nursing care. The regulations sought to create facilities appropriate for these differing needs by differentiating them according to the professional nurse staff component--RNs and LPNs--and range of services required to be certified. SNFs are supposed to be the more medically oriented and more professionally staffed facilities serving patients with greater medical needs. However, the minimal requirements for each type permit a broad range of facilities and of intensity of services to exist in both types, such that considerable overlap between SNFs and ICFs is possible. In fact, the regulations grant states a large degree of discretion as to which facilities will be considered SNFs and ICFs. For this reason there is considerable variation from state to state in the number and proportion of nursing homes that are SNFs as opposed to ICFs. Table 1 shows the variation in number and percentage of facilities by type of nursing home and state. For example, states like Iowa with 6 percent SNF and dual facilities and 94 percent ICF's contrast sharply with states like Pennsylvania which has 94 percent SNF and dual facilities and 6 percent ICF's.

While the designation as a SNF or ICF is supposed to be based on the level of care needed by the residents in the facility, it is unlikely that the nursing home needs of residents of these states are so drastically different, or, that in a state, the needs of one segment of the potential nursing home population or the other are being totally unmet. What is more likely is that patient needs are being served by the existing nursing homes, regardless of how they are labelled. In other words, in some states patients in need of SNF services are being cared for in ICFs that in another state would be considered SNFs.

States may have ulterior motives in their designation of facilities as SNFs and ICFs. It has been suggested that, where there are large differences between the Medicaid payments to SNFs and ICFs, states may tend to certify more nursing homes as ICFs as a way of keeping their Medicaid spending within budget (IOM, 1986).

The amount a nursing home charges for patient care (i.e., reimbursement rates and fees) may affect the type of patient who chooses to use the facility and the type of patient who is eligible for admission. A nursing home's profitability is significantly impacted by the management decisions regarding patient type and mix and extent of resources allocated to patient care services. In order to maximize

Table 1. Number and percentage of facilities by level of care and state, 1981.

| | SNF and SNF/ICF | | ICF only | | Total |
|---|---|---|---|---|---|
| State | Number | Percentage | Number | Percentage | Facilities |
| AK | 10 | 77 | 3 | 23 | 13 |
| AL | 187 | 91 | 19 | 9 | 206 |
| AR | 83 | 40 | 124 | 60 | 207 |
| AZ | 25 | 100 | 0 | 0 | 25 |
| CA | 1,148 | 97 | 36 | 3 | 1,184 |
| CO | 144 | 83 | 29 | 17 | 173 |
| CT | 205 | 89 | 26 | 11 | 231 |
| DC | 3 | 50 | 3 | 50 | 6 |
| DE | 16 | 62 | 10 | 38 | 26 |
| FL | 300 | 98 | 6 | 2 | 306 |
| GA | 230 | 76 | 71 | 24 | 301 |
| HI | 26 | 76 | 8 | 24 | 34 |
| IA | 25 | 6 | 402 | 94 | 427 |
| ID | 56 | 90 | 6 | 10 | 62 |
| IL | 386 | 56 | 301 | 44 | 687 |
| IN | 133 | 31 | 291 | 69 | 424 |
| KS | 55 | 15 | 313 | 85 | 368 |
| KY | 95 | 47 | 109 | 53 | 204 |
| LA | 13 | 6 | 212 | 94 | 225 |
| MA | 265 | 52 | 248 | 48 | 513 |
| MD | 92 | 53 | 82 | 47 | 174 |
| ME | 17 | 12 | 128 | 88 | 145 |
| MI | 292 | 69 | 129 | 31 | 421 |
| MN | 312 | 69 | 142 | 31 | 454 |
| MS | 119 | 83 | 24 | 17 | 143 |
| MO | 89 | 37 | 150 | 63 | 239 |
| MT | 83 | 88 | 11 | 12 | 94 |
| NC | 146 | 72 | 56 | 28 | 202 |
| ND | 57 | 69 | 26 | 31 | 83 |
| NE | 30 | 14 | 187 | 86 | 217 |
| NH | 25 | 34 | 49 | 66 | 74 |
| NJ | 213 | 91 | 20 | 9 | 233 |
| NM | 4 | 9 | 39 | 91 | 43 |
| NV | 23 | 88 | 3 | 12 | 26 |
| NY | 525 | 92 | 45 | 8 | 570 |
| OH | 368 | 43 | 488 | 57 | 856 |
| OK | 9 | 2 | 354 | 98 | 363 |
| OR | 52 | 29 | 126 | 71 | 178 |
| PA | 520 | 94 | 36 | 6 | 556 |
| RI | 60 | 57 | 46 | 43 | 106 |
| SC | 92 | 75 | 31 | 25 | 123 |
| SD | 58 | 51 | 56 | 49 | 114 |
| TN | 57 | 25 | 172 | 75 | 229 |

(continued)

Table 1. (continued).

| State | SNF and SNF/ICF Number | SNF and SNF/ICF Percentage | ICF Only Number | ICF Only Percentage | Total Facilities |
|---|---|---|---|---|---|
| TX | 206 | 21 | 770 | 79 | 976 |
| UT | 40 | 50 | 40 | 50 | 80 |
| VA | 52 | 32 | 111 | 68 | 163 |
| VT | 23 | 52 | 21 | 48 | 44 |
| WA | 224 | 85 | 38 | 15 | 262 |
| WI | 325 | 74 | 113 | 26 | 438 |
| WV | 34 | 40 | 40 | 54 | 74 |
| WY | 17 | 65 | 9 | 35 | 26 |

SOURCE: Institute of Medicine, Improving the Quality of Care in Nursing Homes, 1986, p. 357.

profits, nursing homes prefer patients who pay more (private patients) over those who pay less (Medicaid patients) and prefer patients who require a minimal amount of care. At the same time, a nursing home can minimize expenses by attempting to function with the minimum number of professional staff and by offering them little in the way of benefits or salary (Rango, 1982). Indeed, most care in a nursing home is provided by nurse's aides. These aides often are not trained and work with little or no supervision (IOM, 1986; and DHHS, 1984B).

In reality, the government, in the form of Medicaid, is the largest purchaser of nursing home services. Thus, the amount the nursing home is reimbursed for its Medicaid recipients is a primary determinant of resources available to the nursing home. The expectation is that nursing homes find themselves trying to operate in a cost-based capital environment and allocate their resources accordingly.

Studies of nursing homes show that there are some differences between proprietary and not-for-profit institutions in the utilization of nurses. Winn (1974) found little difference with respect to cost of care and nursing hours, but he found that administrative support was greater in nonproprietary homes Pecarchik and Nelson (1973) found that more services were available in not-for-profit than proprietary institutions, and salaries and benefits were reportedly higher in the not-for-profit homes.

Stryker (1981) found higher nursing staff turnover rates associated with proprietary institutions. She also found turnover greater in nursing homes with more than 50 beds.

Differences in staffing ratios have been shown to exist between hospital based and free-standing SNF's (Wiener, Liu and Schieber, 1986). In a 1985 Health Care Financing Administration (HCFA) report entitled "Study of the Skilled Nursing Benefit Under Medicare" it was demonstrated that hospital-based SNF's have a more severe case-mix of patients than free standing SNF's. Associated with the more severe case-mix is the comparatively higher staff-to-bed ratio including RN's, LPN's and nurse's aides than in the free-standing SNF's.

Identifying factors affecting the staffing patterns of registered nurses in nursing homes is an issue of considerable interest because of the implications of staffing levels for quality of care. If, as the available evidence suggests, the utilization of RNs is associated with higher quality of care, then determining which factors contribute or detract from their utilization may be helpful in developing public policies, including regulations and inspection/survey procedures that will improve nursing home quality.

Although there has been relatively little empirical research on the relationship between structural, process and outcome measures of quality of care, the few studies of staffing have found a positive relationship between the level of nursing staff in general and other more direct measures of quality (e.g., Shaughnessy et al., 1980; see review in Kurowski and Breed, 1981). For example, one study of psychotropic drug use in nursing homes found that higher use was associated with lower staffing levels for nurses and aides (Ray et al., 1980). Linn, Gurel, and Linn (1977) found that the number of RN hours per patient day was positively associated with patient survival, improvement, and discharge from the nursing home. Similarly, a 1977 survey by the AHCA found that those homes rated as superior in quality had higher numbers of RNs per patient day (Hayes, 1977). The Ohio Nursing Home Commission (1979) also studied facilities rated as offering either exceptionally high- or low-quality care, based on reputation, licensure inspections, and certification survey reports. The Commission found that the high- quality facilities consistently and significantly outspent low-quality homes on both overall nursing staff and RNs per patient day. Thus, there is evidence that nurse staffing levels are associated with the quality of care a nursing home provides.

Unfortunately, these studies of the relationship between staffing levels and indicators of quality of care generally have not explicitly examined the factors associated with differences in the utilization of nurses by nursing homes. However, a number of studies have examined factors associated with various other measures of quality, including resource inputs, such as expenditures on patient care (including spending on nurses), licensure and certification violations, and some process quality measures. From these, it is possible to generate a number of hypotheses about factors likely to be associated with variations in RN utilization.

Empirical research is fairly consistent in finding a relationship between nursing home ownership and quality of care, with nonprofit facility ownership being associated with higher quality, using a variety of indicators (e.g., Hawes and Philips, 1986; Goettesman, 1974; Fottler et al., 1981; Lee, 1985; Elwell, 1984; and Greene and Monahan, 1981). Several studies specifically found ownership associated with variations in RN staffing levels (e.g., U.S. Department of Health, Education, and Welfare, 1975, 1979; Winn, 1974; New York, 1975; VJLARC, 1978; and Caswell and Cleverley, 1978).

Other factors associated with variations in resource inputs, such as nurse staffing levels, expenditures on nurses, and other aspects of direct patient care, include the mix of private- and public-pay (Medicaid) patients in a facility (Elwell, 1984; Goettesman, 1974; and Schlenker, 1984), facility size (Ripotella-Muller and Slesinger, 1982; and Gottesman, 1974), facility location (New York, 1975; Elwell, 1984), and certification status (Riportella-Muller and Slesinger, 1982; and Schlenker, 1984). Some research also suggests that reimbursement policies and a facility's Medicaid per diem may be associated with differences in quality, although the relationship appears to be weak (see summary in Schlenker, 1984).

In conclusion, prior research, while it usually does not directly address factors associated with variations in staffing patterns, does suggest which factors or variables may be associated with such differences and which variables ought to be examined in the current research project.

Such an examination can identify factors associated with a nursing home's decisions about nurse utilization. Although knowing the factors affecting a nurse's decision about whether or not to work in a nursing home is important, understanding the factors affecting the facility's choices is also vital in developing a clearer picture of recruitment and retention issues involving nurses in nursing homes.

### 4. Recruitment

Recruitment of professional nurses into long-term care is dependent upon the nursing home designating positions available as well as the professional nurse seeking and accepting an offer of employment in a long-term care facility. Over 79,000 nurses or 8 percent of all employed RNs worked in nursing homes in 1977 (ANA, 1977). In 1984 115,000 nurses or 7.7 percent of the RN workforce were employed in long-term care facilities (DHHS, 1986A).

Recruitment of nurses to long-term care is hampered by several factors. Some data suggest that negative experience with or lack of education about long-term care is a major impediment to attracting clinically competent nurses to long-term care (Poppleton and Cox, 1985). In the past, schools of nursing did not promote the need for subspecialists in long-term care and spent little time discussing the aging process or the needs of the aged. In general, they offered little or no training experience in nursing home settings.

Nurses in long-term care also are accorded the lowest professional status by their peers, according to several sources (Vladeck, 1980; Bunke, 1980; and ANA, 1975). A survey of geriatric nurse practitioners ranked "peers holding a negative image" and "public image of long-term care" as the factors most important in deterring nurses from entering the field of long-term care (Ebersole, 1985). Nurses are not immune to media headlines such as a recent series in the San Jose Mercury entitled "Nursing Home Horrors Persist After Decades of Reform" which contribute to the negative public image of nursing homes (Pope, Smith and Roman, 1986).

Salary is frequently mentioned as an issue of both recruitment and retention. Hospital staff nurses looking for new jobs (McClosky, 1985), as well as nurses currently employed in long-term care facilities (AHCA, 1983), list salary as an important consideration in accepting an offer of employment. Dissatisfaction with salary and/or benefits is cited as a primary reason for quitting by nurses who have left their jobs in long-term care (Cotler, 1985; Rublee, 1986; and Ibaza, 1986). In comparison, nurses who quit their jobs in settings other than long-term care, listed reasons other than salary as the primary reasons for leaving (Cotler, 1985).

Some descriptive data are available which suggest differences between the types of nurses who choose employment in nursing homes rather than other employment settings. Those data suggest that RNs in long-term care are generally older than nurses in other settings (Feldbaum and Feldbaum, 1981; Brower, 1985; and Cotler, 1985), are more likely to have diplomas, and are less likely to have BSNs (Cotler, 1985; and Feldbaum and Feldbaum, 1981).

5. Retention

a. Retention Issues

Overall, retention of nurses in the field of long-term care shares many issues with recruitment. Those factors which serve to attract or deter nurses to or from the field of long-term care also seem to operate on nurses once they have selected an employment opportunity in long-term care. The intrinsic characteristics of the job were found to be the most rewarding and important aspects of the job (AHCA, 1983) while the work conditions such as excess paperwork, nurse/management goal conflict, high rates of employee turnover, and salary were primary sources of dissatisfaction and helped to predict intent to quit (Cotler, 1985). In another study (Deckard, Hicks and Roundtree, 1986) nurses described their work as routine and with little variety. They also reported frequent interruptions by patients and nurse's aides resulting in lower task identity and job feedback.

Sr. Bernadette, (1980) cited the following problems as those facing long-term care facilities in their efforts to recruit and retain RNs:

- It is an employees' market. Most hospitals provide tuition reimbursement, salary differentials for advanced levels of preparation, various levels of nursing practice and career advancement--none of which are common to long-term care facilities. Long-term care facilities cannot afford to furnish these fringe benefits.

- Another problem confronting long-term care is that it has become the reentry level for nurses who have not been active in nursing for many years. These nurses are usually not required to take a refresher course and thus are not familiar with new techniques and new drugs. Lack of current knowledge becomes more critical when these nurses are the sole RN in a facility on a particular shift.

The statistics tend to support the assertions about lower salary. Average salaries of the registered nurse population showed a $4,000 per year differential between hospital nurses and those employed in nursing homes, with the nursing home employees on the lower end of the scale (DHHS, 1986A). In fact, the average salary for the nursing home staff nurse was the lowest across all fields of employment for registered nurses except the ambulatory care settings. The annual differential for increased levels of responsibility was approximately a $1,000 increase in nursing homes compared with a $3,000 to $4,000 increase in hospitals (DHHS, 1986A).

Another characteristic of the staffing of nursing homes is the important role played by nurses from personnel pools (Trocchio, 1980). A survey by AHCA showed that 50 percent of all facilities responding to the survey used pools as a source of staffing. Thirty percent of those responding used licensed pool nurses to take charge of a unit.

The use of pool nurses poses several problems for nursing homes and their residents. Pool nurses cost more than permanent staff members. For instance, in Montgomery County, Maryland, in 1981, the cost of a staff nurse in nursing homes was $6.50/hour per RN while the facility paid $15-20/hour for a temporary employee who received about $9.25/hour (Trocchio, 1980). Quality of care is said to suffer due to inadequate preparation of temporary nursing personnel to care for residents. In addition, continuity of care is disrupted and staff morale suffers as the permanent staff see the temporaries working better shifts for better pay. Accordingly, "the nursing pool phenomenon is only a symptom of long-term care's nurse personnel problems.... We must deal with the total recruitment and retention situation" (Trocchio, 1980).

Poppleton and Cox (NLN, 1985) distinguish three characteristics of the environment as major influences in recruiting and retaining nurses in long-term care or conversely repelling and losing them. They are: (1) physical and structural aspects of the environment, (2) organizational and managerial aspects, and (3) the social factors that influence care.

- Physical and Structural Influences

  The physical environment denotes the smells, sights, and sounds of the nursing home. Adequate supplies, maintaining proper safety and fire standards, levels of cleanliness and odor control all represent the physical environment. Poorly maintained nursing homes are reportedly inadequate at achieving a positive physical environment. This stereotype contributes to the negative image of nursing homes as a place to seek employment and/or predisposes employees to seek employment elsewhere. Other structural characteristics of the environment include the staffing, patient mix, and reimbursement.

- Organization and Management

  In a profile of 100 superior nursing homes, Hays (1977) observed that the administrator plays a key role in the overall climate of the nursing home as well as in meeting the specific responsibilities of administering the entire home. A nursing home usually has a "top down" management structure where the administration sets the policies, rules, and regulations. The administration's attitude toward providing care is reflected in the homes' staffing policies, fiscal policies, and the like. For example, if the nursing home hires an adequate nursing staff, therapists, nutritionists, etc., this reflects the nursing home's attempt to provide therapeutic rather than merely custodial patient care. The provision (or lack) of adequate supplies and the maintenance of a clean, safe, and healthful environment also reflect the degree of management commitment. At the same time, management must be responsive to the individual needs of its employees.

- The Social Milieu and Its Impact

  Society's view of aging is reflected in the attitudes of the professional community toward gerontology and long-term care nursing. There are few graduate programs in gerontology and a complete absence of such courses in many basic nursing programs or medical schools (Poppleton & Cox, 1985).

A great deal of gerontological nursing literature has focused on nurses' attitudes toward aging and the elderly. In these studies, researchers have attempted to identify variables that contribute to negative stereotyping of the aged. These studies reveal that nurses practicing in long-term care as well as other settings often have unfavorable attitudes and negative stereotypes about the elderly (Campbell, 1971; Gillis, 1973; Smith, Jepson, and Perloff, 1982). These attitudes are often present in the student nurse population and have been shown to be related to willingness to work with the elderly (Kayser and Minnegerode, 1975; and Heller and Walsh, 1976). Selected studies evaluating choice of setting after graduation have shown a high degree of disinterest in working with the elderly (Feldbaum and Feldbaum, 1981; and AHCA, 1983).

Both Gillis (1973) and Smith, Jepson, and Perloff (1982) demonstrated that RNs with less than 2 years experience or greater than 9 years experience in a long-term care facility had more positive attitudes toward the elderly than those who worked an intermediate number of years.

In a recent study (Brower, 1985) of 581 RNs employed in a variety of settings, it was found that nurses who spent a high percentage of their time working with older clients had less favorable attitudes than those who spent a low percentage of their time. Younger nurses in nursing homes held the least favorable attitudes, while there was an overall trend toward more positive attitudes being linked to education in institutions of higher learning.

### b. Importance of Turnover

Turnover can be voluntary (i.e., when the nurse chooses to leave the job) or involuntary (i.e., when she or he is let go by the employer). Significant turnover is a problem for any organization. Competent and qualified personnel must be maintained by an organization in order to operate successfully and productively. Turnover has both positive and negative features. New employees can bring innovative ideas and introduce a fresh perspective to the organization. However, when personnel are exiting frequently, it is generally considered to affect an organization adversely. The potentially negative effects of turnover include:

- Financial cost to the organization. This includes the cost of recruiting, selecting, and training new employees. New employees require greater supervision which leads to decreased productivity of some employees and often leads to overtime costs of these employees (Stryker, 1981).

- Poor quality of care. Staff cohesiveness is disturbed by the need to integrate new people (Bergman et al., 1984). The time and energy needed to orient new nurses increases the workload of the nursing staff. This results in uneven standards of care which is distressing to both staff and patients (Gordon, 1982).

Little data are available on the turnover rate of nurses in long-term care. In a report released in 1970 by the U.S. Senate Subcommittee on Long-Term Care, the turnover rate for all nursing home personnel was reported as 60 percent (Stryker, 1981). A study of nursing home administrators in eight Pennsylvania nursing homes revealed that almost one-half of the nursing homes felt that recruiting as well as retaining qualified staff was their most important problem (Pecarchik, 1973).

### c. Theoretical models

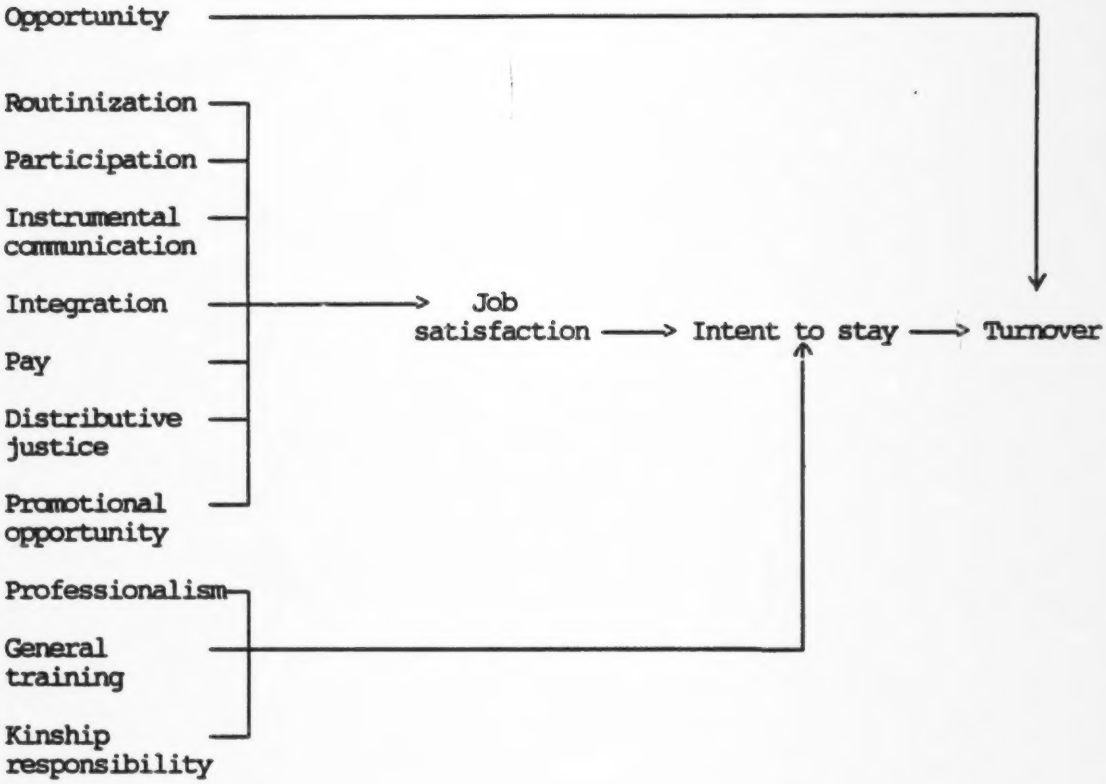
#### (1) Model Description

Price and Mueller (1981) found that certain factors seem common to turnover in all fields of work. They found that leaving usually takes place during the early months of employment; it is more likely to occur among younger persons and is likely to occur less often when there is greater personal integration into the organization with more formal and informal communication.

Price and Mueller use the model cited in Figure 1 to explain the turnover of hospital nurses. They describe each of the variables in the model as determinants of turnover. Some of these variables act as intervening variables. For example, intent to stay intervenes between job satisfaction and job turnover. Job satisfaction intervenes between intent to stay and seven other determinant variables. Intent to stay reflects the individual's personal commitment to remaining in the organization.

In another approach, Hackman and Lawler (1971) and Hackman and Oldham (1976) (see Deckard, Hicks and Rountree, 1986) suggest that the simultaneous experience of skill variety, task identity, task significance, autonomy and job feedback are necessary for desirable

Figure 1. The causal model of turnover


Opportunity
Routinization
Participation
Instrumental communication
Integration
Pay
Distributive justice
Promotional opportunity
Professionalism
General training
Kinship responsibility
Job satisfaction
Intent to stay
Turnover

SOURCE: James L. Price and Charles W. Mueller, Professional Turnover: The Case of Nurses, p. 11.

levels of internalized work motivation, general work satisfaction and satisfaction with growth and development opportunities.

The factors thought to influence job turnover can be combined into four categories. These are intrinsic, extrinsic, personal and environmental.

Intrinsic factors relate to the inherent values or needs of the individuals. Intrinsic factors relating to job satisfaction include status or recognition of performance, degree of autonomy, promotional opportunity, professionalism, and humanistic concerns.

Extrinsic factors are external to the individual and arise through interaction with the environment. Extrinsic factors relating to job satisfaction include salary and benefits, structural characteristics of the work environment, administrative policies, relationships with staff, shift scheduling, patient case mix, educational opportunities, availability of child care, occupational stress, and safety and security needs such as adequate personnel per shift, job security, and safe environment.

Personal factors are characteristics of the individual such as age, marital status, family responsibilities, economic needs, and experience as a nurse.

Environmental factors include alternative places of employment and the political and regulatory forces impacting on nursing homes. These factors are out of the control of both the individual facility and the individual nurse.

### (2) Job Satisfaction

Job satisfaction has been linked to reduced rates of turnover (Price, 1981). Satisfaction is an indicator of an employee's motivation to come to work. Job attendance is strongly influenced by the attractiveness of attending the job. Theories of motivation suggest that people are motivated by unmet needs (Smith, 1980). Maslow suggests these needs can be ordered in a hierarchy. The lower levels deal with basic needs for food, water, safety, and security, while the higher level needs are psychological and emotional (see Slocum, Susman and Sheridan, 1972). Herzberg, in further developing this theory, states that certain factors, roughly corresponding to Maslow's lower level needs, add to dissatisfaction if not met, but cannot increase satisfaction when met (see Smith, 1980). In turn, fulfillment of higher level needs is associated with job satisfaction. The lower level needs are related to the extrinsic factors while the higher level needs are of an intrinsic nature. These theories have helped form a basis for numerous studies that attempt to pinpoint the relationship of both intrinsic and extrinsic needs in contributing to and achieving job satisfaction. Satisfaction with one's job presumes congruence with one's needs.

When seeking employment it is more difficult to assess the intrinsic rewards a new job will bring. Thus, nurses turn to the extrinsic factors which can be easily assessed before accepting an offer of employment. Salary and benefits are one way of rewarding experience and merit. This would explain why at the same time that nurses give high ratings to the importance of intrinsic factors in achieving job satisfaction (McClosky, 1985; AHCA, 1983; Cotler, 1985) and assign low ratings to financial rewards, they list low pay as a primary reason for leaving a job (AHCA, 1983; Cotler, 1985) and a primary consideration in seeking new employment (McCloskey, 1985).

## 6. Conclusions

America's population is growing increasingly older, with more than 10 percent (STAT ABSTRACT, 1983) of all people 65 years of age or older. As the proportion of aged individuals has increased, the need for health care or rehabilitation services for this population has grown.

Although the services received by the aged population can be found in a variety of settings, many individuals requiring long-term care are cared for in nursing homes. According to the American Nurses Association (ANA, 1975), "the individual requiring long-term care is one who suffers from one or more chronic conditions which have resulted in a physical and/or mental impairment of normal activities and which require prolonged and supervised care or treatment, necessitating at least, but not only, professional nursing assessment, evaluation, monitoring, judgment and coordination of services and environmental support systems appropriate to the individual's health needs."

Nursing care, by definition, constitutes the major component of services provided in nursing homes and extended-care facilities. Yet only 8 percent of the total number of employed registered nurses in the nation can be found in nursing homes, an understaffing situation according to the ANA. Research studies show that greater numbers of nurses have been associated with improved resident outcomes (IOM, 1986). Also, many nursing homes still rely on untrained and unlicensed nursing personnel to provide 80 to 90 percent of the care while the professional nurses' time is spent on supervisory and administrative duties.

Nursing home administrators are facing the critical issue of determining appropriate staffing needs to ensure competent and quality care. Areas of concern for administrators as well as policymakers include recruitment, retention, and utilization of RNs. It is known that job acceptance and job satisfaction in all occupations are largely dependent on the subjective perception of the organizational climate and of the job (Cotler, 1985). Factors leading to job satisfaction in nursing include both intrinsic and extrinsic factors.

There are few research studies that have examined recruitment and retention of RNs in the field of long-term care. Some data suggest that the lack of long-term care educational experience is an impediment to attracting competent nurses to long-term care (Poppleton and Cox, 1985). This lack of preparation often leaves nurses who enter the field of long-term care inadequately prepared to deal with an elderly population of persons who are disabled, chronically ill, often mentally affected, and frequently dying. In addition, the physical environment of nursing homes contributes to their negative appeal. Some nursing homes are known to be poorly maintained, inadequately supplied, unclean and unpleasant smelling, and understaffed.

Although Federal SNF regulations require registered nurses to work as directors of nursing, charge nurse positions may be held by LPNs. In a nursing home on a given day, the only RN present may be the director of nursing and all patient care may be administered by LPNs and nurse assistants. At the same time, there may be an absence of on-site medical supervision and, frequently, a lack of other professional personnel (i.e., physical and occupational therapists). These staffing standards are often unrealistic and inappropriate to meet the needs of the residents. Nursing home salaries and fringe benefits are not competitive with the market place and serve to reinforce the low status of long-term care nursing.

The same factors that discourage nurses from seeking jobs in nursing homes cause them to leave once they have been employed. Inability to retain personnel has implications for the cost of care, staff morale, and level of patient care. Recruiting, selecting, training, orientating, and supervising a new employee may equal several months' salary. Staff cohesiveness is disturbed by the need to integrate new people (Bergman, 1984). The time and energy needed to orient new nurses increases the workload of the nursing staff. All of this results in uneven standards of care, which distress both patients and staff.

Recruitment can be viewed as a two-sided issue, considering both the nurse's motivation to work and the nursing home's motivation to hire (or not hire) (Hawes, 1986). Thus, the staffing level in a nursing home is dependent on both the availability of a position and the RN's desire to fill the position. The nurse's willingness to work in a nursing home is affected by the attractiveness of other employment opportunities available. The literature suggests that, while many nursing students as well as registered nurses are predisposed to negative stereotyping of the elderly, a selected few choose to seek out nursing homes as their place of employment. The research is inconclusive on the reasons that might explain this. It has been hypothesized that prior training, as well as on-the-job in-service education, supportive administration, predisposition to offer a rehabilitative environment with high RN-patient ratios as well as utilization of other health professionals would make the nursing home a more attractive place to work and thereby improve recruitment and retention of RNs.

The nursing homes motivation to hire or staff the nursing home and the job responsibilities of the RN are measures of RN utilization in nursing homes. Utilization may be negatively impacted by the profit motives of a nursing home. A nursing home trying to cut costs may do so by reducing the number of RN's on staff and offering few incentives in the way of salary or fringe benefits.

There is some evidence that ownership effects nurse utilization, although this relationship needs to be examined more closely. Other factors effecting the utilization of nurses in nursing homes also need to be addressed more carefully to determine their relationship.

## B. Postulated Models

### 1. Introduction

The purpose of the postulated models was to provide a basis for analysis of the retention, recruitment and utilization of registered nurses in nursing homes. For each of these three subject areas, a model was developed that postulated the relationship among RNs, nursing homes, and environmental factors (independent variables) and one or more measures of the outcome (dependent variables), i.e., measures of recruitment, retention, and utilization of RNs. The three models provide a theoretical structure for the selection of measures to be used and the relationships to be investigated in the study.

The models were based largely on the review of the literature; however, because of the paucity and limitations of the literature concerning the recruitment, retention and utilization of RNs in nursing homes it was necessary to supplement the descriptions with professional judgment. Input was provided by the project team, a resource staff, consultants, and the project sponsor.

The postulated models were just that--a presupposition or premise of a line of reasoning based on the best information available. The intent of this analysis was to show the existence and measure the strength of any of the postulated relationships.

Because the analyses were limited to selected national data bases, it was only possible to investigate some of the postulated relationships. While data were available for many of the independent factors, they were not available for all of the important factors that affect recruitment and retention. In order to make the description of the relationship complete, the models included the factors affecting recruitment, retention, and utilization, regardless of whether data were available.

Before recruitment, retention, and utilization are dealt with as separate entities, the interaction among these three processes is discussed. RN recruitment affects the number and type of RNs that are being employed by nursing homes (i.e., it affects the flow of RNs into nursing homes). Recruitment involves both the employer and the prospective employee. For an RN to be employed in a nursing home, the nursing home must offer a position to a nurse that the nurse must accept.

Alternatively, retention is concerned with nurses remaining employed in nursing homes, or with controlling the flow of nurses out of nursing homes. This outflow may be precipitated either by the nurse or by the nursing home. Unlike recruitment, where both the RN and the nursing home had to be in agreement to be employed, the departure of an RN can be initiated by either party.

Utilization can be viewed as both the number and types of RNs employed by the nursing home as well as how they are used within the nursing home. The recruitment and retention of RNs (the inflow and outflow of nurses), integrated over time, will determine the size and characteristics of the RN staff being used by the nursing home. How the RN is used in carrying out the nursing home's mission is a function of the facility's management.

In the following sections each model is presented as an exhibit with the depicted relationships discussed in the text. The discussion of the model is followed by sections delineating the dependent and independent variables used to measure the relationships.

## 2. Postulated Model For The Retention Of Registered Nurses

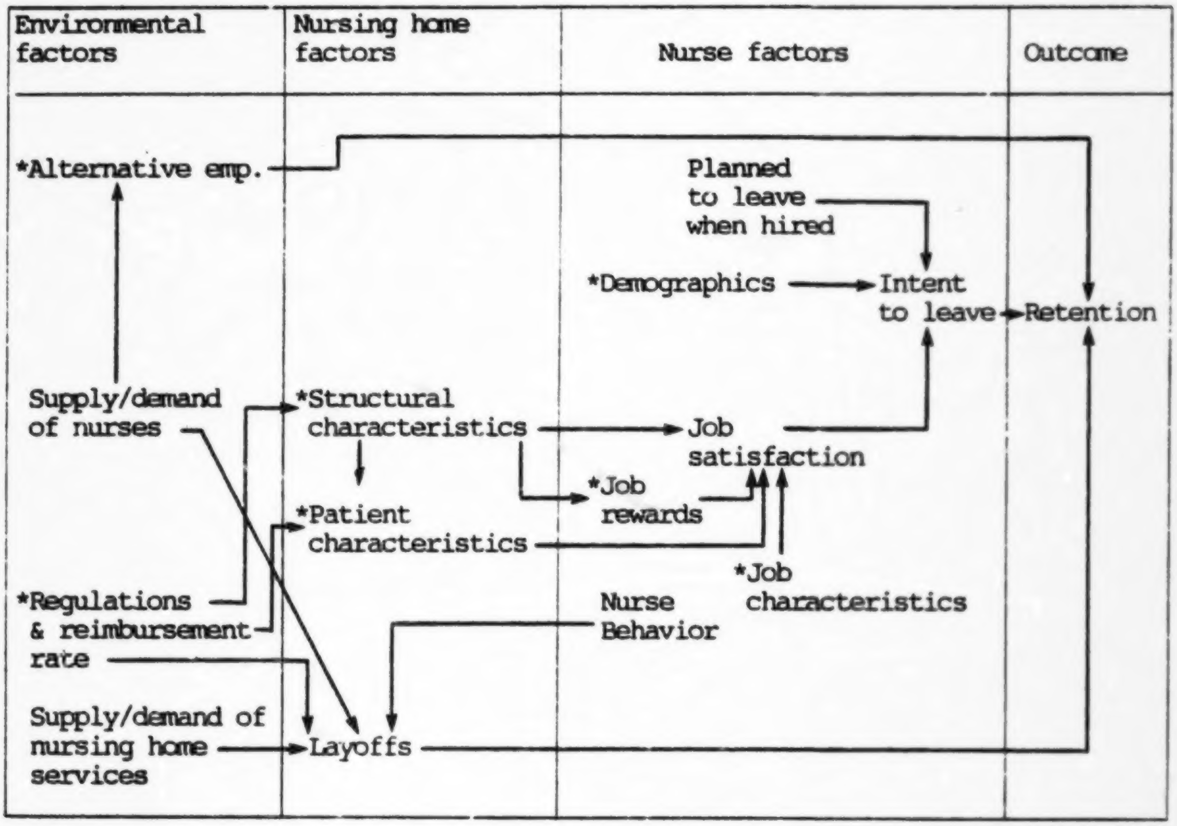
### a. Model Description

The postulated model for the retention of registered nurses by nursing homes is presented in Figure 2. This model shows that whether an RN stays or leaves a nursing home is affected by the nurse's intent to leave the nursing home, alternative employment opportunities, and management's intent to lay off nurses.

The nurse's intent to leave the nursing home has been shown to be affected by the nurse's plans to leave the nursing home when she or he was hired, the nurse's demographic characteristics, and the nurse's satisfaction with the job (Price and Mueller, 1981). Nurses may accept positions in nursing homes even though they plan to leave when they are hired. Some of the reasons for taking a temporary job are: the need for employment until a better opportunity became available; working to put a spouse through school, and when the spouse graduated the family relocated; and working for a limited period of time in order to pay some large family expense, e.g., the cost of educating a child.

Demographic variables such as educational background, age, and marital and child status are suggested as factors that may affect a nurse's intent to leave her or his present position. The better the nurse's educational background, the more employment opportunities she or he is likely to have available (Price and Mueller, 1981) and thus the greater the likelihood of a nurse changing jobs in order to improve her or his economic or professional position. The young single nurse is expected to be more mobile than the older married nurse with children (Westat, Inc. 1986).

Figure 2. Postulated model of factors affecting the retention of RNs


Environmental factors
Nursing home factors
Nurse factors
Outcome
*Alternative emp.
Planned to leave when hired
*Demographics
Intent to leave
Retention
Supply/demand of nurses
*Structural characteristics
Job satisfaction
*Job rewards
*Patient characteristics
*Job characteristics
*Regulations & reimbursement rate
Nurse Behavior
Supply/demand of nursing home services
Layoffs

NOTE: *Data from the NNHS and NSSRN files were available and used for some variables in this category.

Satisfaction with the job will also affect a nurse's intention to leave a nursing home (Price and Mueller, 1981). The many factors affecting job satisfaction have been classified into job, patient, and structural characteristics and job rewards.

Job characteristics include items such as length of a normal workweek, work shift, type of position, specific work activities the nurse performs, and type of employment arrangement (temporary employment service or regular employee). Whether or not a nurse is satisfied with the specific job will affect the nurse's intentions to leave her or his present position. For example, a married nurse with children may prefer weekday work or part-time work while a single nurse may need the income from full-time, multishift employment. If a nursing home cannot or will not make adjustments in the nurse's job, then the nurse may become dissatisfied and look for work elsewhere.

Patient characteristics may also affect a nurse's satisfaction with her or his job. Patient's physical and mental health status differ as do their behavioral characteristics and memory impairment. If a nurse is required to care for patients she or he finds objectionable, then she or he may look for an opportunity to change work environments.

Job rewards can include both tangible and intangible factors, such as salary, fringe benefits, opportunity for professional enhancement, and the sense that the nurse's work is being appreciated. If a nurse feels that she or he is not being rewarded sufficiently for her or his effort, the nurse is likely to become disenchanted with the job and seek other employment (Price and Mueller, 1981; Cotler, 1985; Rublee, 1986; AHCA, 1983).

Structural characteristics may affect job satisfaction directly or indirectly. Management's philosophy of care, staffing level, types of nurses that are utilized for various types of tasks, size of the nursing home, whether the nursing home is an independent facility or part of a chain, and the types of services that are offered by the nursing home may all affect job satisfaction in one way or another (Poppleton and Cox, 1985). For example, working in a nursing home whose philosophy is to provide high quality care is likely to be more satisfying to a nurse than working in a nursing home that provides minimally acceptable care. Low staffing levels by the nursing home are likely to result in either the nurses being overworked or a slippage in the quality of care. This also may affect how much a nurse likes her or his job.

Regulations and reimbursement rates may affect several nursing home factors--structural characteristics, patient characteristics, and layoffs. Medicare and state minimum nursing requirements may affect a nursing home's staffing level as well as the type of nurse they employ (RN or LPN). The required number of nurses may also influence whether nurses are laid off. If the minimum nursing requirements vary by size of the facility, as they do in some states, then they might affect the size of a nursing home (i.e., the nursing home may be just under the size requiring more nurses). If a facility is certified for Medicaid or Medicare patients, either or both will affect the types of patients the home will have, which in turn may affect how the nurse feels about the job.

As mentioned earlier, retention may be affected by the nursing home's intent to lay off nurses. A nursing home may lay off a nurse because of her or his behavior or because management believes the facility is overstaffed. The judgment that a nursing home is overstaffed may be based on its workload relative to the size of the staff or on its financial condition. The general supply and demand for nursing home services can affect the occupancy level which impacts the workload, which in turn affects the requirement for nurses. In the current environment, the states are controlling, through certificate of need legislation, the number of nursing home beds that are available and thus, most nursing homes have a high occupancy (Rango, 1982).

It is hypothesized that the availability of alternative employment opportunities that are acceptable to a nurse will affect her or his decision to stay or leave a nursing home. If a nurse identifies a job that appears to be more rewarding than her or his present employment, the nurse's interest in leaving the nursing home would increase. The availability of alternative employment opportunities is shown in the exhibit to be affected by the general supply and demand for registered nurses in the market place. When there is a shortage of nurses, there are likely to be more employment opportunities.

The above model includes many of the factors that may affect the retention of registered nurses in nursing homes. Of these factors, data were available from the NNHS and the NSSRN on the demographic characteristics of nurses, nurses' job rewards, nurses' job characteristics, structural characteristics of nursing homes, alternative employment opportunities, and patient characteristics. The dependent and independent variables associated with these factors are discussed below.

b. Dependent Variables For Retention

In measuring retention, it is desirable to know who has left the employ of the nursing home and who has stayed. This would allow computation of a departure rate for each nursing home in the sample and to use it in analyzing the nursing home factors that may have influenced the nurses' departure. Such data would also permit making comparisons between those nurses that left and those that stayed. These data, however, were not available from a national data base. Consequently, the NNHS and the NSSRN data bases were reviewed to identify the best possible measures of retention. Of greatest relevance was the number of years a nurse worked in a facility. This information was available on a sample of RNs employed in the sampled nursing homes. The basic data were obtained from a question with five response categories--working in the facility less than 1 year, 1 up to 2 years, 2 up to 3 years, 3 up to 5 years and 5 years or more; thus this measure was limited to these categories or some combination of them.

Another way to assess retention is through the use of the 45 factors that were rated by the responding RNs for their importance to retention. Because of the number of factors involved and the 5 point scale on which the factors were rated, it was necessary to find a way to scale the measure in order to keep the analysis within practical bounds. The first step was to reduce the 5 point scale to a 2 point scale--very or all important in one category and not, slightly or somewhat important in another. The second step was to reduce the 45 factors to 5 categories--working conditions, scheduling, salary considerations, benefits, and professional opportunities. Based on the number of factors within a category that the nurse scored as very or all important the category was rated as being of low, medium or high importance to the nurse. Thus the 45 factors affecting recruitment were reduced to 5 outcome measures (working conditions, scheduling, salary considerations, benefits, and professional opportunities), each with 3 levels of importance (low, medium and high). The factors that were included in each outcome measure are discussed later in the retention section.

The final measure of retention is the 1-year change in the RNs employment status. This measure was based on the NSSRN data file. Though a 1-year change was not a good measure of retention, it remained the best measure available from this data base. An advantage of this data base is that it permitted an assessment of retention across settings, thus permitting the comparison of nursing homes retention rates to those of hospitals and other settings.

In summary, the measures of retention discussed above were:

- Number of years a nurse worked in a specific nursing home.
- Importance of working conditions to retention.
- Importance of scheduling to retention.
- Importance of salary considerations to retention.
- Importance of benefits to retention.
- Importance of professional opportunities to retention.
- One-year change in employment status.

c. NNHS Independent Variables

In Figure 2, the factors for which data were available from the NNHS and NSSRN and used in the study are noted with an asterisk. The data items in the NNHS data file falling within each of the categories relevant to retention were:

- Demographic and background characteristics
  - age
  - race/ethnicity
  - marital status
  - child(ren) status
  - highest nursing-related education
  - geriatric education
  - continuing education
  - years worked since graduation
  - other employment.
- Job characteristics
  - usual workweek
  - work shift
  - type of position
  - work activities
  - participation in decisions

- Job rewards
    - salary
    - fringe benefits and payroll taxes
- Structural conditions
    - ownership
    - nursing home chain status
    - number of beds
    - certification status
    - admissions as a function of the number of beds
    - deaths as a function of all discharges
    - inpatient days
    - number of different types of services offered
    - number of different types of staff available
- Regulatory and reimbursement rates
    - Medicare rate
    - Medicaid rate for skilled nursing facilities
    - Medicaid rate for intensive care facilities

Independent variables for "alternative employment" were not available from this data base; they are discussed later. Patient characteristics are addressed in another section of the report since they cannot be directly related to the dependent variables that are based on a sample of nurses.

d. NSSRN Independent Variables

The factors in Figure 2 for which data from the NSSRN were available and that fell within the categories related to retention were:

- Demographic
    - age
    - race/ethnicity
    - marital and child(ren) status
    - highest educational preparation
    - years since graduation
    - other employment
- Job characteristics
    - employment arrangement
    - full- or part-time status
    - type of position
- Job reward
    - salary

### e. Independent Variables From Other Sources

To check the influence of other employment opportunities on retention, data were obtained from the Area Resource File on the number of hospital beds in the county. Not only are most nurses employed in hospitals, but the number of hospital beds in the county is probably a good surrogate measure of employment opportunities in settings other than hospitals and nursing homes.

Information on the states' minimum requirements for RNs in nursing homes also was obtained. These data permitted the assessment of the effect of state requirements on retention. The minimum RN requirements were specified as a function of the state, certification status, and size of the facility.

### f. Patient Characteristics as Related to Retention Analyses

Because the data were only available on a small sample of the patients in nursing homes, it is not possible to describe a specific nursing home in terms of patient attributes; however, patient characteristics for a group of nursing homes (e.g., all government nursing homes included in the sample) can be reported. Furthermore, the attributes of the sample of RNs associated with a category of nursing homes can be described; thus, both the RNs' and the patients' characteristics can be stated for the same category of nursing homes. Expanding on the above example, it is possible to describe the patients and RNs for all government, proprietary, and nonprofit nursing homes in the national sample. This would permit estimating whether nursing homes have a different mix of patients as well as dissimilar RN staffing patterns according to their type of ownership.

Undertaking this analysis requires specifying the groups of nursing homes for which the analyses were to be made and the patient and RN characteristics of interest. For the retention analyses, the RN characteristic of interest was the number of years a nurse worked in a facility; thus, the analyses were to determine if there was a significant difference in the tenure of RNs for various categories of nursing homes and whether changes in tenure relate to changes in patient characteristics. The factors on which the nursing homes were categorized and the patient characteristics of interest were as follows:

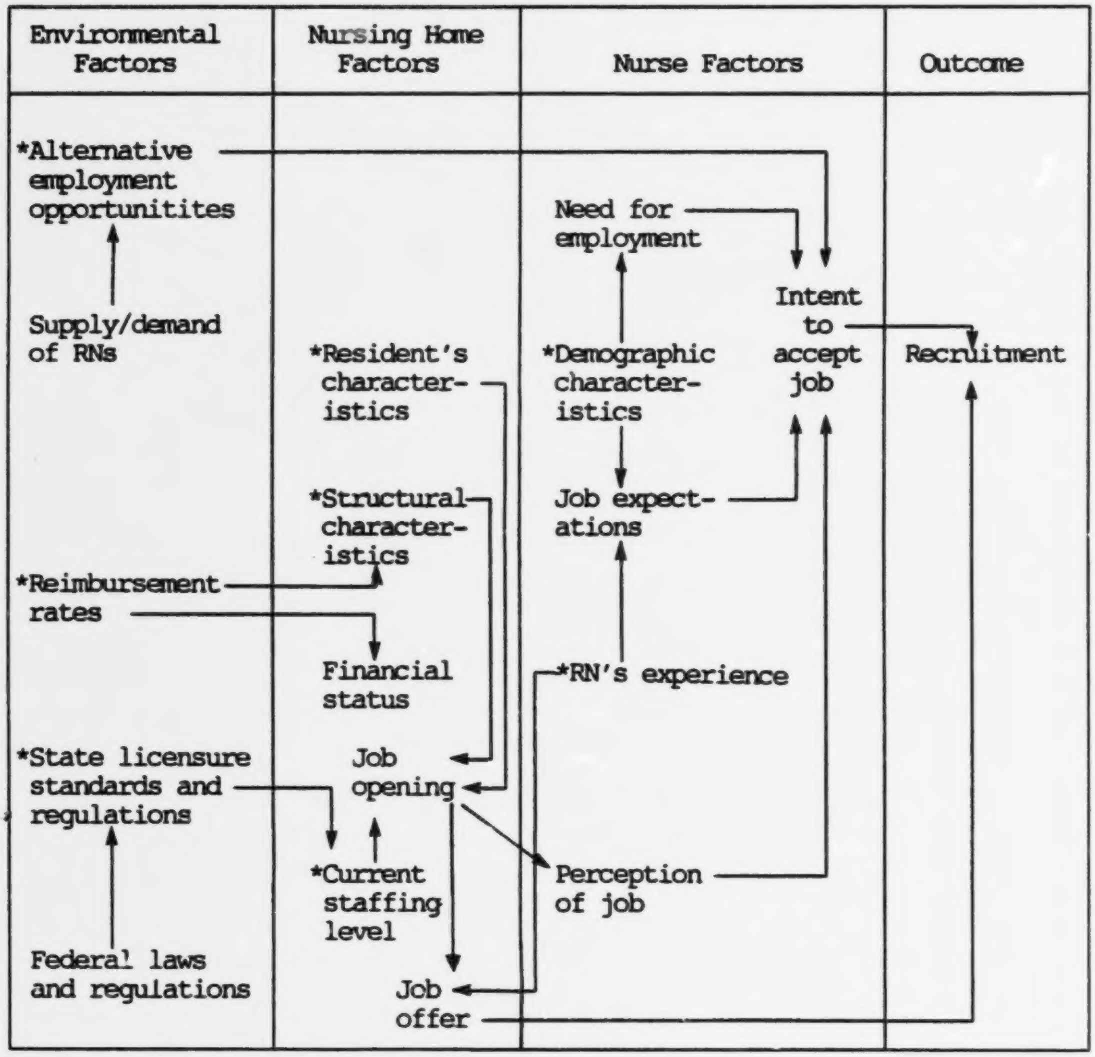
- Nursing home groups to be based on
    - ownership
    - nursing home chain status
    - number of beds
    - certification status
    - number of different types of services offered
    - number of different types of staff that are available
- Patient characteristics of interest
    - age
    - race
    - current marital status
    - living children
    - length of stay
    - physical health status
    - mental health status
    - behavioral problems
    - memory status
    - primary source of payment for month following admission

3. Postulated Model for the Recruitment of Registered Nurses

a. Model Description

The postulated model for the recruitment of registered nurses is shown in Figure 3. The hiring of a nurse by a nursing home depends on the nursing home making an offer and having it accepted by the nurse. The model indicates that a nurse's intent to accept a job is dependent on her or his job expectations, need for employment, perception of the specific job that is available, and availability of alternative job opportunities. In other words the nurse must answer the following questions. Do I really need or want to be employed? If yes, are there any jobs that meet my expectations? If yes, does the specific job that is being offered meet my expectations or are there other available jobs that I may prefer? Though a nurse's decision to accept a job may involve weighing the trade-offs between these and possibly other factors, (rather than making yes/no choices), the factors appear to be those that would most influence a nurse in deciding whether to accept a position.

Figure 3. Postulated model of factors affecting the recruitment of RNs


Environmental Factors
Nursing Home Factors
Nurse Factors
Outcome
*Alternative employment opportunitites
Supply/demand of RNs
*Reimbursement rates
*State licensure standards and regulations
Federal laws and regulations
*Resident's characteristics
*Structural characteristics
Financial status
Job opening
*Current staffing level
Job offer
Need for employment
*Demographic characteristics
Job expectations
*RN's experience
Perception of job
Intent to accept job
Recruitment

NOTE: *Data from the NNHS and NSSRN files were available and used for some variables in this category.

A nurse's need for employment may be financial, psychological or have some other basis. Single nurses may have an economic need to be employed, while married nurses may have more of a choice, but may still have an economic motivation. The presence of children in a family, particularly young children, may dilute the economic advantage of employment because of the need to pay for child care; however, for single parent families, work may be essential. The motivations for employment may be more psychological. A nurse's desire for achievement, advancement, or to do something that is meaningful and rewarding may also be a strong motivation to be employed.

Given that a nurse wants to be employed, she or he may have certain job expectations. The expectations may be related to a sense of purpose, salary, benefits, potential for advancement, skill level required, type of position that is acceptable, educational opportunities, and where they will work. Some nurses may want a challenging environment, while others may find a challenging environment beyond their skills or too stressful. Each nurse brings to a job opportunity their own expectations.

In considering a job, the nurse develops a perception of the job. Usually the salary, fringe benefits, position title, work location, etc. are known by the nurse before she or he accepts a job. Personality of the staff, intrinsic rewards of the job, and the level of stress associated with the job are usually poorly or unknown. In between are many features that are imperfectly known. These job perceptions re usually subjectively compared to the job expectations in making a decision concerning employment. If the job expectations and perception of the job being offered are not consistent, then the nurse may consider other employment opportunities. If other opportunities are not available, the nurse may still accept a less than desirable position with the expectation of accepting a better position when one becomes available.

The number of alternative employment opportunities depends on the supply of and demand for nurses as well as the number and type of health care providers located in the area. The number of available opportunities is also dependent on the nurse's willingness to move and the types of jobs she or he will accept.

The nurse's demographic characteristics may affect both the need for employment and job expectations. As previously mentioned, single nurses may have more of an economic need for employment than married nurses. A baccalaureate-prepared nurse may have different job expectations than a nurse receiving her or his education through an associate degree program.

An RN's experience may also affect her or his job expectation as well as the job offer. A nurse who has been a director of nursing in a nursing home is likely to have different job expectations than a nurse who is coming back into nursing after a 10-year absence. The nurse's experiences also could affect whether an offer is made to her or him and the nature of the offer.

The job opening is dependent on: the work required to care for the residents, whether the staff is adequate to provide the care, the adequacy of the nursing home's financial resources to pay for the position, and the nursing home's structural characteristics. The job offered to a nurse is based on a position being open and the availability of an appropriate candidate, i.e. that there is a nurse applicant the nursing home management believes is appropriate for the open position.

The resident's characteristics determine the workload. Some residents require more care, while others may require more complex types of care, e.g., residents who cannot perform most of the acts of daily living will require more personal care, while other residents may require intravenous feeding, a task requiring a higher level of nursing skill. Thus the mix, as well as the number of patients will determine the workload (IOM, 1986; and Rango, 1982).

Structural characteristics, such as the RN/LPN/aide mix, overall level of staffing, criteria used for accepting residents, and size of the facility, will determine the number of RNs that are required to perform the work. These structural characteristics are an important consideration in determining whether an opening exists.for an RN.

The financial status of the nursing home also influences the decision to hire an RN. If expenses exceed revenues or there is a desire for a larger profit margin, the decision to hire another nurse may be delayed or the workload may be distributed among existing staff. If finances are in "good shape" then the cost associated with hiring a nurse is not a barrier.

Reimbursement rates directly affect the financial status of the nursing home and also influence management in making decisions which establish the structural characteristics of the nursing home.

The current staffing level also influences the decision to hire an RN. If RNs have left the nursing home, it is easy to recognize vacancies that need to be filled. However, if the size or mix of the resident population has changed, the difference between the current RN requirement and the RNs that are available may be less obvious.

State nursing home licensure standards and regulations set minimums for the nursing staff. These, along with Federal laws and regulations, influence the minimum number of RNs a nursing home must have.

b. Dependent Variables for Recruitment

A good measure of recruitment was difficult to determine. Possibly, the percentage of offers that were accepted by the nurses or the number of RNs hired per year as a proportion of the number of RNs employed by the nursing home would be important factors to consider. Regardless of the measures considered ideal, the data bases that were available limited what could be used. From the NNHS nursing staff questionnaire it was possible to identify RNs who had been hired within the past year and to use this information to determine if the recently hired nurse differed from those who had been employed for a longer period of time. From the RN sample survey it was also possible to identify newly hired nurses. These RN survey questions permitted a comparison of nurses recently hired by nursing homes with nurses recently hired in other settings.

The nursing staff questionnaire also asked the nurses to assess the importance of various factors in recruitment. The variation of these responses among types of nurses could be studied to determine not only what was perceived by nurses to be important for recruitment but also the type of nurse who believed it was important.

Although the data associated with the above questions may not be the ideal measure of recruitment, they nonetheless provided some useful information. Questions concerning how long the nurses worked in the current facility and the 1-year change in employer were the same questions used as measures of retention; thus, the dependent variables for recruitment and retention were essentially the same. The only difference was how the responses to the question on how long the nurse was employed in the facility were categorized. Because the same independent measures were used for the recruitment and retention analysis, the list of independent variables will not be repeated here. Furthermore, the question in which the nurses rated the importance of various factors to recruitment was formatted in the same way as the question asked concerning retention. Thus, the dependent and independent variables will be the same for the recruitment and retention analysis.

4. Postulated Model for the Utilization of Registered Nurses in Nursing Homes

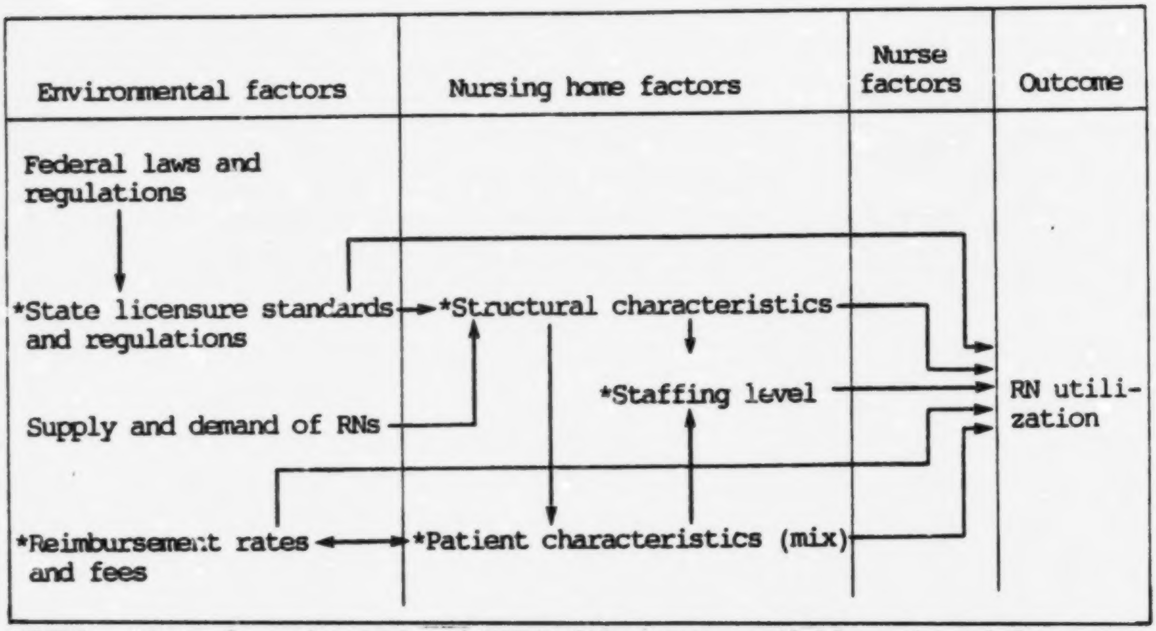
a. Model Description

Utilization of RNs can be described in terms of nursing home staffing or the functions and tasks that RNs perform. These two dimensions of utilization may not be independent, e.g., as the size of the staff increases in relationship to the patient population, the number of different types of services the nursing home provides also may increase. Though the postulated model shown in Figure 4 only addresses the factors that affect the number and type of RNs in nursing homes, both aspects of RN utilization are addressed in the analysis.

As discussed earlier, the number and type of RNs employed by a nursing home is a result of the nursing home's recruitment effort and turnover; consequently, the number and type of RNs used by a nursing home is affected by all of the factors that affect recruitment and retention. Not all of the factors that affect recruitment and retention were included in the postulated model presented in Figure 4. An attempt has been made to include those variables that were most likely to affect the RN staffing level.

The model indicates that RN utilization is primarily affected by nursing home and environmental factors. Nurse-related factors have not been included in the model. The nursing home factors that affect utilization are the structural characteristics of the nursing home, the patients' characteristics, and the staffing level. The structural characteristics that may affect RN utilization include ownership, size, location, certification status, and percent of patients that have Medicaid coverage. It is suggested that proprietary nursing homes with a profit motivation may staff at a lower level than government owned nursing homes. One might expect the economy of scale to come into play when comparing the number of RN hours per patient day between the larger and smaller nursing homes. Certification status of the nursing home, with its associated nursing requirements, would be expected to influence the use of RNs in the facility. Because Medicaid reimbursement rates are usually relatively low,

Figure 4. Postulated model of the factors affecting RN utilizations


Environmental factors
Nursing home factors
Nurse factors
Outcome
Federal laws and regulations
*State licensure standards and regulations
*Structural characteristics
*Staffing level
Supply and demand of RNs
*Reimbursement rates and fees
*Patient characteristics (mix)
RN utilization

NOTES: *Data from the NNHS and NSSRN files were available and used for some variables in this category.

it is expected that the staffing level may also be lower in facilities that have a larger proportion of Medicaid than Medicare or self-pay patients.

The patient characteristics of interest are those that affect the need for skilled nursing care and RN supervision. Patients that may take more RN time are those continuing their recovery from a hospitalization, those with a severe illness, and those with multiple illnesses. The proportion of patients in a nursing home requiring more intense RN care should increase RN utilization.

The staffing profile may also affect RN utilization because of staff substitution. The RN staffing level may vary with the number of LPNs and aides (IOM, 1986) as well as with the availability of a physician.

Some of the nursing home factors are affected by environmental factors. Nursing home structural characteristics may be affected by State licensure standards and regulations as well as by the supply and demand of RNs. If the supply of RNs is high relative to the demand, the nursing home may use more RNs, while a low available supply may cause the nursing home to substitute with other types of personnel.

The amount a nursing home charges for patient care (i.e., reimbursement rates and fees) may affect the type of patient who chooses to use the facility and the type of patient who is eligible for admission. A nursing home's profitability is significantly impacted by the management decisions regarding patient type and mix and extent of resources allocated to patient care services. In order to maximize profits, nursing homes prefer patients who pay more (private patients) to those who pay less (Medicaid patients) and prefer patients who require a minimal amount of care. At the same time, a nursing home can minimize expenses by attempting to function with the minimum number of professional staff and by offering them little in the way of benefits or salary (Rango, 1982).

In reality, the government, in the form of Medicaid, is the largest purchaser of nursing home services. Thus, the amount the nursing home is reimbursed for its Medicaid recipients is a primary determinant of resources available to the nursing home. The expectation is that nursing homes find themselves trying to operate in a cost-based capital environment and allocate their resources accordingly.

State licensure standards and regulations may directly affect RN utilization by specifying the minimum requirements for RNs. If nursing homes routinely staff at a level higher than the minimum, then the State laws will have minimal effect; however, if nursing homes staff at the minimum level, then a strong relationship is expected.

### b. Dependent Variables for Utilization

The dependent variables associated with the staffing level of RNs that appeared appropriate for the analyses were:

- Number of hours of RN's time per inpatient day and
- RNs as a proportion of the nursing staff.

The first measure provides an indication of the amount of RN time in relation to the workload; the second measure is concerned with the emphasis placed on RNs in comparison to LPNs and aides.

### c. NNHS Independent Variables

The independent variables studied in conjunction with both of the above measures were as follows:

- Structural characteristic
  - ownership
  - nursing home chain status
  - number of beds
  - certification status
  - number of different services offered
  - LPN/LVN hours per inpatient day
  - percent Medicaid (ICF and SNF) inpatient days
  - nursing staff payroll/total expense
- Staffing level
  - LPNs, nurses aides or orderlies per inpatient day
  - Physician availability
- Environmental
  - Medicare reimbursement rates
  - skilled nursing facilities rates
  - intermediate care facilities rates

d. Independent Variables from Other Data Bases

The only independent variable used in the analysis that was from a source other than NNHS was the state minimum requirements for RNs in nursing homes. These data were obtained from the individual state laws or reports on those laws.

e. Patient Characteristics as Related to Utilization Analyses

The reason for treating patient characteristics differently was described in Section III.B.2.f. The approach that was used for the retention analyses also was used for utilization except more RN-related variables were considered. The additional variables were:

- RNs per inpatient day
- RNs as a proportion of the nursing staff
- Proportion of RNs with each type of preparation
- Geriatric nurse preparation
- Years worked for pay as RN

f. Descriptive Analysis

In addition to the regression analyses that were undertaken, some descriptive analyses were performed. These included tabulations of the following:

- Activity participation by:
  - highest nursing related education
- Highest nursing related education by:
  - type of position
  - salary
  - prior job
  - nursing home ownership
  - nursing home chain states
  - number of beds
  - certification status of nursing home
- RNs as a percentage of the nursing staff by:
  - ownership
  - nursing home chain status
  - number of beds
  - certification status
  - number of different types of services offered

## C. Analytical Approach

The general analytical approach taken was equally applicable to all of the dependent variables or outcome measures for the study's three subject areas. To avoid repetition, it was presented only once in this section.

The analytical steps that were undertaken are summarized as follows:

1. Defined the variables and categorized the continuous variables.
2. Prepared cross-tabulations of independent and dependent variables.
3. Reviewed the cross-tabulations, restructured the cells, and created composite variables for further analysis.
4. Prepared a descriptive analysis of the tabulations.
5. Performed a series of regressions for each major group of independent variables. The regressions were structured to determine the individual effect of each variable in the group and the combined effect of all the variables in the group.
6. Selected the statistically significant independent variables in each major independent variable group.
7. Performed a series of regressions using all of the variables selected in the previous step.
8. Presented and interpreted the results.

The first step was an initial review of all the potentially important data items. Appropriate coding specifications were drawn up for the categorical variables, and continuous variables were categorized for use in tabular displays. The coding and categorization of variables was done so that the postulated models described in Section III.B could be studied. Specific lists of variables of potential importance are given in subsequent sections. The variables used were of two types: dependent variables, which were the measures of recruitment, retention, and utilization; and independent variables, which were the characteristics of the RNs, the characteristics of the nursing homes, and the environmental factors that could affect recruitment, retention, and utilization.

The second step in the analysis plan cross-tabulated the independent variables with the dependent variables. Based on these cross-tabulations, the third step in the general analytical approach was to review the tables to determine which variables were misspecified. Cells with an insufficient sample size for analysis were collapsed in a meaningful way with other categories for use in subsequent analyses. In addition, appropriate composite variables were defined using the cross-tabulations. At this point, a descriptive presentation of the tabulations was prepared.

For the three subject areas--retention, recruitment, and utilization--the independent variables were classified into related groups of variables as shown in Section III.B. The definition of the variables used in the regression analyses are given in Appendix C. The independent variables in a group were related and dealt with a common dimension of the retention, recruitment, or utilization issue. The relative importance of each variable within a group of independent variables was determined first. The most important variables in each group were then used in a combined analysis.

It was not expected for all of the independent variables within a group to be significantly related to the dependent variables. The variables were sifted through using a series of regression models which systematically included and excluded variables based on the strength of the interrelationships of the independent variables with the dependent variables. This was done separately within each independent variable group.

Using the significant independent variables from each group, the analysis under step 6 combined all of the variables to determine the overall most important independent variables. This step also relied upon a structured set of regressions to sift through the variables.

The regression models used in these analyses included two kinds of independent variables -- continuous and categorical. Examples of continuous variables are the RN's age and weekly salary. Two examples of categorical variables are the RN's race and the indicator of other employment. The regression coefficient for a continuous variable was the slope measuring the amount of change in the dependent variable per unit change in the independent variable. For the categorical variables, a reference cell parameterization was used. Under this framework, a categorical variable with m levels generated m-1 estimated coefficients with the omitted level being the reference cell. For example, the variable race with the three values of white, black and other was used to generate two coefficients corresponding to black and other. A categorical variable coefficient estimated the mean of the dependent variable across the cell in question minus the mean across the reference cell adjusted for the other variables in the model. In the example, the coefficient for blacks estimated the difference in the means between black RNs and white RNs adjusted for all the other variables in the model.

The regression analyses report the p-value associated with each coefficient. The p-value measures the support of the data for rejecting the hypothesis that a coefficient is truly different from zero. Coefficients with a p-value less than 0.05 can be considered as being statistically significantly different from zero.

The data from the two surveys that were analyzed for this report were collected using stratified, clustered, and unequally weighted sample designs. Such complex designs greatly reduced the cost of collecting the data, but required special consideration when analyzing the data. The 1985 National Nursing Home Survey (NNHS) used a stratified two-stage sample design with nursing homes selected as the primary sampling units and RNs within nursing homes selected at the second stage. The RNs in the 1984 National Sample Survey of Registered Nurses (NSSRN) were drawn by first selecting a sample of alphabetic clusters of RN names from the licensure files of each state. These clusters were nested across states so that, to the extent possible, RNs licensed in multiple states could be determined and only included in the sample once.

All of the analyses (both tabular and regression) for the 1985 NNHS were completed using RTI's survey data analysis software which properly used the sampling weights and the stratified nested design in the computation of the estimates and their standard errors. This software uses a Taylor series linearization approach and assumes replacement sampling of the primary sampling units (nursing homes).

The sample design for the 1984 NSSRN required a different variance estimation method. For the descriptive analyses, a jackknife variance estimation method was used. This is the same method used by Westat, Inc. (1986) when summarizing the 1984 NSSRN. Standard software was not available for the jackknife method and it had to be developed for the tabular analyses. The expense of developing and running jackknife variance estimation software for the NSSRN regression analyses proved to be prohibitive. For the regression analyses, ordinary least squares methods, weighted to account for the unequal probabilities of selection were used. While this approach provided the proper estimates of the regression coefficients, it may have underestimated the variance of the coefficients and, hence, overstated the level of significance of the variables, i.e., the p-values may be too small. For this reason, only those variables that are clearly significant in the NSSRN regression analyses, i.e., with a p-value less than 0.01, should be considered.

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# IV. ANALYSIS AND RESULTS

## A. Employment of Registered Nurses in Nursing Homes

### 1. Introduction

This analysis of the employment of registered nurses in nursing homes focused primarily on the level of nurse staffing, but also examined the functions and tasks that nurses were asked to perform in nursing homes. Among the questions addressed were:

- How do nurses employed in the nursing home setting differ from nurses employed in other settings?
- How do the work activities of nurses employed in nursing homes vary, and what effect do their level of training and experience have on the work activities they perform?
- How do nursing homes differ with respect to their structure and environment, the nurses they employ, and the patients who reside in them?
- How are the differences among nursing homes related to differences in their utilization of nurses?

To answer the first question, data collected in a national sample survey of registered nurses was used. Attention was limited to demographic and work characteristics that distinguish nurses working in nursing homes from those working in hospitals (the primary employer of nurses), and in settings other than nursing homes and hospitals, e.g., schools, health departments, physician's offices, etc.

The second question was addressed with data collected in a national sample survey of nursing homes. While this survey included data obtained from nursing home administrators, nurses and patients, only the nurse data was used to describe the activities of nurses in nursing homes.

Data from all three types of respondents in the national sample survey of nursing homes, and secondary data from the Area Resource File, was used to examine the third and fourth questions. Variation in the number of registered nurse hours available per patient and in the proportion of nursing staff who were registered nurses was examined. In addition to a tabular analytic presentation of data, regression modelling was used in an effort to explain why there were differences among nursing homes in the number of registered nurses employed. Tabular support for the analysis in this portion of the report is contained in Appendix D.

### 2. Comparison of Nurses Employed in Nursing Homes, Hospitals and Other Settings

In 1984, slightly less than eight percent of the estimated 1.5 million registered nurses employed in the U.S. were working in nursing homes. More than two-thirds of employed nurses were employed in hospitals, with just less than one-quarter employed in other settings.

#### a. Age and Race

Nurses employed in the nursing home setting were considerably older than nurses working in hospitals. More than half of the registered nurses employed by hospitals were under 35 years of age, whereas just slightly more than 20 percent employed in nursing homes were that young (see Table 2). At the other end of the age continuum, less than 10 percent of the nurses employed by hospitals were 55 years of age and over, while just about 25 percent of those working in nursing homes were in that age group. The age distribution of nurses employed in other settings was more similar to that of nurses employed by nursing homes than hospitals, but they were somewhat younger nonetheless.

There was very little variation in the racial and ethnic composition of the registered nurses employed in nursing homes, hospitals or other settings. Approximately 90 percent of nurses in all three settings were white.

#### b. Marital Status and Age of Youngest Child

There were differences in the marital status of nurses employed in the three settings. Nurses in the hospital setting were slightly less likely to be married than nurses employed in nursing homes or other settings. Consistent with their younger age, the proportion of nurses working in hospitals who were never married was more than twice as large as the never married nurses employed by nursing homes. On the other hand, the proportion of nurses employed by nursing homes who were widowed, divorced or separated was slightly higher than for nurses working in hospitals.

While similar proportions of nurses working in all three settings reported being married and having children--just under 50 percent--the proportion with children under six years of age was about 10 percent more

Table 2. Estimated number and percent of registered nurses by employment setting and age.

| Age | Total |  | Employment setting |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Nursing home |  | Hospital |  | Other |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(•) | 100.0(•) |
| Under 35....... | 633,321 | 42.6 | 25,165 | 21.9 | 511,706 | 50.6 | 96,257 | 26.9 | 192(•) | 92.8(•) |
| 35-44.......... | 398,333 | 26.8 | 28,696 | 24.9 | 257,758 | 25.5 | 111,864 | 31.2 | 15(•) | 7.2(•) |
| 45-54.......... | 262,053 | 17.6 | 30,599 | 26.6 | 146,344 | 14.5 | 85,110 | 23.7 | 0(•) | 0.0(•) |
| 55-64.......... | 147,877 | 10.0 | 22,949 | 19.9 | 73,692 | 7.3 | 51,237 | 14.3 | 0(•) | 0.0(•) |
| 65 and over.... | 19,731 | 1.3 | 5,388 | 4.7 | 6,294 | 0.6 | 8,049 | 2.2 | 0(•) | 0.0(•) |
| Unknown........ | 24,410 | 1.6 | 2,280 | 2.0 | 16,160 | 1.6 | 5,969 | 1.7 | 0(•) | 0.0(•) |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNS employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

among nurses employed in hospitals than in nursing homes or other settings. This is, of course, consistent with the younger age of nurses employed in hospitals.

### c. Years Since Graduation and Highest Educational Preparation

Registered nurses employed by nursing homes were much more likely to have graduated from their nursing program 15 or more years ago than were nurses working in hospitals. Just about one-third of hospital nurses had been graduated 15 years or more, but nearly two-thirds of nurses working in nursing homes had had that much time since graduation (see Table 3). The experience of nurses employed in other settings was more similar to nurses in nursing homes than to those in hospitals. This pattern of the number of years since graduation is consistent with the age distributions of the nurses in the three settings.

A major difference between nurses employed in nursing homes and those working in hospitals and other settings was the highest level of educational preparation for nursing they had completed. While approximately 40 percent of the registered nurses employed in hospitals and other settings had a diploma, more than 60 percent of the nurses working in nursing homes were diploma-trained nurses (see Table 4). This may also reflect the older age of many of the nursing home nurses, as diploma-granting nursing schools were more prevalent in the past than they have been in recent years. Nurses employed in other settings were much more likely to have earned bachelor's degrees in related areas and graduate degrees than nurses working in hospitals or nursing homes. Nearly 15 percent of nurses employed in other settings had these degrees, as compared to less than two percent of nursing home nurses.

### d. Work Schedule and Other Employment

The majority of nurses were employed full-time in all three work settings. However, nearly 45 percent of the nurses employed in nursing homes were part-time employees, in contrast to about one-third of nurses working in hospitals and other settings. Despite the large proportion of nurses working in nursing homes on a part-time basis, this group of nurses reported the lowest proportion of additional employment. Just over five percent of nursing home nurses had other employment, compared to nearly 10 percent of hospital nurses and 15 percent of nurses employed in other settings.

Table 3. Estimated number and percent of registered nurses by employment setting and years employed in nursing.

| Years since graduation | Total | | Employment setting | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Nursing home | | Hospital | | Other | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total.. | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(*) | 100.0(*) |
| Under 5 years. | 251,059 | 16.9 | 12,246 | 10.6 | 215,679 | 21.3 | 23,027 | 6.4 | 107(*) | 51.7(*) |
| 5 to 9 years.. | 334,810 | 22.5 | 14,369 | 12.5 | 263,809 | 26.1 | 56,546 | 15.8 | 85(*) | 41.2(*) |
| 10 to 14 years | 248,030 | 16.7 | 12,653 | 11.0 | 176,989 | 17.5 | 58,387 | 16.3 | 0(*) | 0.0(*) |
| 15 or more years | 642,602 | 43.3 | 75,032 | 65.2 | 349,710 | 34.6 | 217,845 | 60.8 | 15(*) | 7.2(*) |
| Unknown....... | 9,224 | 0.6 | 776(*) | 0.7(*) | 5,767 | 0.6 | 2,681 | 0.7 | 0(*) | 0.0(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table 4. Estimated number and percent of registered nurses by employment setting and highest educational preparation.

| Highest educational preparation | Total | | Employment setting | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Nursing home | | Hospital | | Other | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total.... | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(*) | 100.0(*) |
| Associate Degree...... | 372,572 | 25.1 | 24,901 | 21.5 | 288,089 | 28.5 | 59,567 | 16.6 | 15(*) | 7.2(*) |
| Diploma....... | 620,350 | 41.8 | 68,493 | 59.5 | 399,873 | 39.5 | 151,983 | 42.4 | 0(*) | 0.0(*) |
| Baccalaureate. in nursing.. | 355,340 | 23.9 | 14,500 | 12.7 | 257,150 | 25.4 | 83,499 | 23.3 | 192(*) | 92.8(*) |
| Other baccalaureate, master's and doctorates | 130,970 | 8.8 | 6,034 | 5.2 | 63,464 | 6.3 | 61,471 | 17.1 | 0(*) | 0.0(*) |
| Unknown....... | 6,495 | 0.4 | 1,149(*) | 1.0(*) | 3,379 | 0.3 | 1,967 | 0.5 | 0(*) | 0.0(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

### e. Weekly Salary and Position

The weekly salary level of nurses employed full-time in nursing homes was considerably lower than that paid to nurses working in hospitals. More than 55 percent of the registered nurses employed full-time in nursing homes earned less than $400 a week, but only 25 percent of hospital-employed nurses earned this little. The proportion of nurses employed in other settings whose weekly salary was less than $400 a week was in between the hospital and nursing home nurses--just under 45 percent. At the other end of the salary continuum, nursing home nurses had less than half the proportion earning $500 a week or more than was true for nurses working in hospitals and other settings. This was true despite the fact that nurses employed in nursing homes had many more years of nursing experience.

Most nurses held the position of staff, general duty or specialty nurse, regardless of their employment setting. In the hospital setting, however, more than three-quarters of the nurses filled staff or general duty positions, as compared to just over half of the nurses employed in nursing homes and 60 percent in other settings (see Table 5). More than 40 percent of nursing home nurses reported administration and supervision as their primary position, whereas about 15 percent of nurses employed in hospitals and other settings held such positions. About one-quarter of the nurses not working in nursing homes or hospitals reported holding other kinds of positions, e.g., teaching, research, etc.

### 3. Work Activities, Educational Preparation and Nursing Experience

The utilization of registered nurses involves how many nurses are employed in nursing homes, but it also involves how they are used in that setting. This section of the report is based on the national nursing home survey's sample of registered nurses employed in nursing homes. It focuses on the degree to which the nurses said they were involved during a usual work week in each of nine frequently performed activities, four less frequently occuring activities, and three policy related areas. In addition to reporting on the relative frequency with which nurses said they were involved in the performance of the nine frequently performed activities, the extent to which their level of educational preparation for nursing and years of nursing experience were associated with variations in their involvement in these frequently performed activities was investigated as well.

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Table 5. Estimated number and percent of registered nurses by employment setting and position.

| Position | Total | | Employment setting | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Nursing home | | Hospital | | Other | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total... | 1,485,725 | 100.0 | 116,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(•) | 100.0(•) |
| Staff, general duty or specialty nurse | 1,068,567 | 71.9 | 59,228 | 51.5 | 790,007 | 78.1 | 219,276 | 61.2 | 48(•) | 23.2(•) |
| Administrative/ Supervisory or head nurse | 260,778 | 17.6 | 47,868 | 41 | 164,231 | 16.2 | 48,774 | 13.6 | 107(•) | 51.7(•) |
| Other........ | 156,297 | 10.5 | 8,188 | 7. | 57,678 | 5.7 | 90,436 | 25.2 | 0(•) | 0.0(•) |
| Unknown...... | 93(•) | 0.0(•) | 0(•) | 0.0(•) | 41(•) | 0.0(•) | 0(•) | 0.0(•) | 52(•) | 25.1(•) |

SOURCE: 1984 National Sample Survey of Registered Nurs

POPULATION: RNS employed as RNs in th U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

The items analyzed in this section were intended to measure the components of a nurse's activities in the nursing home setting. They do not measure the time allocated to the activities in either an absolute or relative sense, nor were they intended to. Instead, the items provide an indication, from the RNs' perspective, of how involved they were with a range of activities. Thus, a reported high level of involvement may reflect almost exclusive performance of a relatively infrequently performed activity, as well as regular performance of a fairly frequently performed activity. In both cases, the activities constitute important components of the RNs' perception of their job in the nursing home setting.

a. Administering Routine Therapies

A majority of the registered nurses (53.2 percent) reported that they were always involved in the performance of routine therapies such as providing medications, applying dressings, or performing decubitus care (see Table 6). Nurses with less than five years of nursing experience reported a greater level of involvement in the administration of routine therapies than nurses with five years or more of experience. Two-thirds of the nurses with less than five years of experience said they were always involved with providing routine therapies, as compared to only half of those with more experience.

A similar relationship existed with the level of educational preparation. Associate degree level nurses had the highest proportion who reported always or very often being involved with the performance of routine therapies (74.0 percent), with somewhat less involvement being reported by diploma trained nurses (68.1 percent), and even slightly less by nurses holding bachelor's degrees in nursing (62.5 percent). A real drop in involvement with the performance of routine therapies was reported by nurses with bachelors' degrees outside of nursing, and holders of masters and doctorate degrees (43.5 percent). Nearly half of the nurses in this "other" education group (47.9 percent) said they were seldom or never involved with the performance of routine therapies, as compared to only about one fourth of those whose nursing educational preparation was an associate degree, diploma or bachelors degree in nursing.

Table 6. Frequency with which RNs are involved in activities commonly performed in nursing homes.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| Activities | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Administer routine therapies.............. | 53,063 | 53.2 | 13,747 | 13.8 | 8,602 | 8.6 | 19,174 | 19.2 | 6,048 | 6.1 | 1,073 | 1.1 |
| Administer complex therapies ............ | 26,172 | 26.2 | 22,808 | 22.9 | 18,205 | 18.3 | 24,085 | 24.2 | 7,324 | 7.3 | 1,113 | 1.1 |
| Giving personal care.... | 11,890 | 11.9 | 15,265 | 15.3 | 17,674 | 17.7 | 43,241 | 43.4 | 10,554 | 10.6 | 1,083 | 1.1 |
| Observing and charting.. | 62,775 | 63.0 | 18,012 | 18.1 | 7,164 | [illegible].1 | 8,236 | 8.3 | 2,578 | 2.6 | 1,002 | 1.0 |
| Teaching and counseling patients.............. | 19,408 | 19.5 | 26,997 | 27.1 | 20,519 | 20.6 | 26,610 | 26.7 | 5,207 | 5.2 | 967 | 1.0 |
| Determining patient care plans.................. | 46,738 | 46.9 | 29,786 | 29.9 | 10,800 | 10.8 | 8,805 | 8.8 | 2,738 | 2.7 | 841(•) | 0.2(•) |
| Evaluating and modifying care plans............ | 36,987 | 37.1 | 29,116 | 29.2 | 14,189 | 14.2 | 13,205 | 13.2 | 5,138 | 5.2 | 1,072 | 1.1 |
| Assigning and supervising nursing staff......... | 64,138 | 64.3 | 20,007 | 20.1 | 4,922 | 4.9 | 6,077 | 6.1 | 3,713 | 3.7 | 849 | 0.9 |
| Planning and providing diversion ............ | 2,189 | 2.2 | 7,172 | 7.2 | 14,253 | 14.3 | 37,963 | 38.1 | 36,839 | 36.9 | 1,292 | 1.3 |

SOURCE: 1986 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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### b. Administering Complex Therapies

Only slightly more than one-fourth of the nurses (26.2 percent) said they were always involved in the performance of complex therapies such as intravenous and gastric feedings, administration of oxygen and suction, or removal of fecal impaction. This was about half the level of involvement reported by these nurses with regard to routine therapies.

Nurses with less than five years of nursing experience had a slightly higher level of involvement in the administration of complex therapies than nurses with five years or more of experience. This is most apparent from the proportions who said they seldom or never were involved with complex therapies--21 percent of nurses with less than five years of experience as compared to just less than 35 percent of nurses with more experience.

The level of involvement with complex therapies of nurses whose highest educational preparation was a bachelors degree outside of nursing or a masters or doctorate degree was much lower than for nurses whose educational preparation consisted of an associate degree, diploma or baccalaureate in nursing. More than 51 percent of the nurses in the "other" education group reported they were seldom or never involved with complex therapies, in contrast to less than 30 percent of nurses whose educational preparation was an associate degree, diploma or baccalaureate in nursing.

### c. Giving Personal Care

Giving personal care, such as bathing, dressing and feeding patients, was not an activity that greatly involved nurses in its performance. Only slightly more than 10 percent said they always were involved in giving personal care.

The proportion of nurses who reported never being involved in giving personal care increased with years of nursing experience--from about five percent of nurses with less than five years of experience to more than 16 percent of those with 30 years or more. The level of educational preparation made no difference in the involvement of nurses with giving personal care, except for nurses with a bachelors degree outside of nursing or a masters or doctorate degree. Two-thirds of this "other" education group reported being seldom or never involved with giving personal care, whereas just half of the nurses with an associate degree, diploma or bachelors degree said they seldom or never provided such care.

d. Observing and Charting Patients

Observing changes in the physical, mental and emotional status of patients, and charting their condition, was one of the activities in which a majority of nurses reported they were always involved. A somewhat larger proportion of nurses with less than five years of experience (76.7 percent) said they were always involved in that activity than was true of more experienced nurses, about 60 percent of whom said they were always involved with it. Nurses with bachelors degrees not in nursing or with masters or doctorate degrees reported doing less observation and charting of patient condition than other nurses. While approximately 10 percent of the nurses with an associate degree, diploma or bachelors degree in nursing reported seldom or never being involved in patient observation and charting, more than 25 percent of the "other" education group reported seldom or never doing it.

e. Teaching and Counseling Patients

Just less than 20 percent of nurses indicated that they were always involved in teaching or counseling patients about such things as their treatment, foot care or ostomy care. There was a tendency for a larger proportion of nurses with 20 or more years of experience to report seldom or never being involved with patient education than was true for less experienced nurses. There was little difference among nurses in their involvement with patient education according to their educational preparation.

f. Developing Patient Care Plans

Almost half of the nurses reported always being involved in the development of patient care plans. This included assessing patient status, planning for care and communicating to staff. The only exception was for nurses with 30 or more years of experience. Only a little over 35 percent of them reported always being involved in the development of patient care plans. There were no differences in involvement with care plan development according to educational preparation.

g. Evaluating and Modifying Patient Care Plans

Nurses were somewhat less likely to always be involved in evaluating and modifying patient care plans than they were in the development of the plans. Less than 40 percent said they were always involved in evaluating and modifying patient care plans, as compared to just under 50 percent who reported always being involved in the development of the care plan. There was no meaningful variation according to level of educational preparation, but nurses with 30 years or more of experience were less involved with this activity than nurses with less experience. Only 30 percent of the nurses with 30 or more years of experience were always involved in plan evaluation and modification.

h. Assigning and Supervising Nursing Personnel

The assignment and supervision of nursing personnel who provide patient care was the activity that the largest proportion of nurses said they always performed. Nearly 65 percent of the nurses reported they were always involved in the management of nursing personnel. The level of involvement differed very little according to years of experience, but the pattern of responses was somewhat different with respect to their level of educational preparation for nursing. Approximately 70 percent of associate degree level nurses reported always being involved with nursing staff assignment and supervision, whereas only 50 percent of the nurses with bachelors degrees outside of nursing and masters or doctorate degrees said they were always involved with the activity. Diploma and bachelors of nursing degree holders were in between the other two groups of nurses.

i. Planning and Providing Recreation Programs

Planning and providing diversion or recreation programs for patients was the activity in which nurses were least involved. While approximately two percent said they were always involved in this activity, 75 percent reported they were seldom or never involved with it. While there was no consistent pattern of differences across nurses according to their educational preparation, the level of involvement in patient recreation activity decreased with the level of nursing experience. Whereas more than 30 percent of nurses with less than five years of experience said they were never involved with the activity, nearly 50 percent of nurses with 30 years or more of experience reported never being involved with it.

j. Less Frequently Occurring Activities

The frequency with which RNs were involved with four less frequently occurring activities is presented in Table 7. The activities included were: planning and participating in research, conducting staff education, attending staff education activities, and participating in or conducting educational experiences for nursing or other health professional

Table 7. Frequency with which RNs are involved in activities less commonly performed in nursing homes.

| Activities | Frequency of involvement | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Does not occur | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | | | |
| Planning and/or participating in research | 2,110 | 2.1 | 6,358 | 6.4 | 7,475 | 7.5 | 21,289 | 21.4 | 21,917 | 22.0 | 38,240 | 38.4 | 2,320 | 2.3 |
| Conducting staff education.............. | 10,478 | 10.5 | 20,555 | 20.6 | 15,933 | 16.0 | 23,703 | 23.8 | 25,204 | 25.3 | 2,580 | 2.6 | 1,256 | 1.3 |
| Attending staff education activities... | 21,210 | 21.3 | 40,981 | 41.1 | 23,507 | 23.6 | 9,411 | 9.4 | 2,316 | 2 3 | 810(*) | 0.8(*) | 1,473 | 1.5 |
| Participating in or conducting educational experiences for nursing or other health professional students............ | 7,755 | 7.8 | 18,029 | 18.1 | 14,154 | 14.2 | 21,460 | 21.5 | 24,061 | 24.1 | 12,441 | 12.5 | 1,807 | 1.8 |
| **Standard errors** | | | | | | | | | | | | | | |
| Planning and/or participating in research | 307 | 0.3 | 571 | 0.6 | 672 | 0.6 | 1,306 | 1.1 | 1,490 | 1.2 | 1,637 | 1.3 | 355 | 0.4 |
| Conducting staff education.............. | 650 | 0.7 | 1,264 | 1.1 | 1,065 | 0.9 | 1,371 | 1.1 | 1,418 | 1.2 | 428 | 0.4 | 264 | 0.3 |
| Attending staff education activities... | 1,077 | 1.0 | 1,726 | 1.3 | 1,087 | 1.3 | 701 | 0.7 | 491 | 0.5 | 233 | 0.2 | 298 | 0.3 |
| Participating in or conducting educational experiences for nursing or other health professional students........... | 581 | 0.6 | 1,091 | 0.9 | 1,004 | 0.8 | 1,171 | 1.0 | 1,367 | 1.1 | 882 | 0.8 | 470 | 0.5 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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students. Of the four, attending staff education activities was reported by more than 20 percent of RNs as something which always involved them. Nearly 40 percent of the nurses indicated that research did not occur where they worked, and another 40 percent responded that they were seldom or never involved in it. Only small proportions of nurses reported always being involved in conducting staff education (10.5 percent) or student training (7.8 percent).

### k. Involvement in Making Policy Decisions

Nurses employed in nursing homes were relatively uninvolved in making institutional, patient care and personnel policy (see Table 8). They were most involved in patient care policy making and least involved in determining personnel policy. Approximately 20 percent of the nurses responded that they were always involved with the former, and just over 10 percent were that involved with the latter.

### l. Summary

From this analysis of self-reported nurse involvement with nine selected activities frequently performed in nursing homes, it is clear that there are two activities in which most nurses were always involved. The assignment and supervision of nursing staff, and the observation and charting of patient condition were always performed by nearly 65 percent of nursing home registered nurses. One other activity--administering routine therapies--had nearly 55 percent of the nurses always involved in it. The activity which involved nurses the least was the planning and provision of diversion or recreational programs for patients. More than 75 percent of nurses were seldom or never involved in that activity. Giving personal care to patients was another activity in which nurses were not highly involved. Nearly 55 percent reported that they seldom or never gave personal care.

With the exception of giving personal care, nurses with fewer years of nursing experience tended to report more involvement with the selected activities than nurses with more years of experience. The most marked differences were between nurses with less than five years of experience and those with 30 or more years of experience.

A pattern also existed with respect to the highest level of nursing educational preparation for all activities except teaching and counseling patients, evaluating and modifying care plans, and planning and providing

Table 8. Frequency with which RNs are involved in making policy decisions.

| Policy area | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Determining: | | | | | | | | | | | | |
| Institutional policy.... | 15,860 | 15.9 | 19,439 | 19.5 | 11,219 | 11.3 | 23,349 | 23.4 | 28,978 | 29.1 | 862(*) | 0.9(* |
| Patient care policy.... | 19,843 | 19.9 | 18,718 | 18.8 | 12,260 | 12.3 | 22,710 | 22.8 | 25,450 | 25.5 | 726(*) | 0.7(* |
| Personnel policy.... | 12,412 | 12.4 | 9,254 | 9.3 | 7,314 | 7.3 | 17,615 | 17.7 | 51,952 | 52.1 | 1,161 | 1.2 |
| **Standard errors** | | | | | | | | | | | | |
| Determining: | | | | | | | | | | | | |
| Institutional policy.... | 1,111 | 1.0 | 1,174 | 1.0 | 948 | 0.8 | 1,323 | 1.1 | 1,577 | 1.3 | 224 | 0.2 |
| Patient care policy.... | 981 | 0.9 | 1,243 | 1.0 | 876 | 0.8 | 1,379 | 1.1 | 1,457 | 1.2 | 190 | 0.2 |
| Personnel policy.... | 740 | 0.7 | 633 | 0.6 | 993 | 0.9 | 1,111 | 1.0 | 2,113 | 1.2 | 257 | 0.3 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unusable because the relative standard error is more than 30 percent or the sample size is less than 25.

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recreational programs. Associate degree, diploma and bachelors of nursing degree holders tended to be more involved with all activities (but the three mentioned above) than nurses with bachelors degrees outside of nursing or holders of masters and doctorate degrees.

None of the four less frequently occurring activities involved nurses to a great extent. Just over 20 percent reported always attending staff education activities, while about half that number were always involved in conducting staff education.

Nurses were not frequently involved in determining policy concerning the institution, patient care or personnel. Just 20 percent reported that they were always involved in patient care policy determination, the largest percentage, whereas only 12 percent reported always being involved in development of personnel policy, the smallest percentage.

### 4. Nursing Homes As A Context for RN Employment

This section provides an overview of the nursing home as an environment in which registered nurses were employed. It begins with the facilities being described according to a variety of structural and other characteristics. This is followed by a description of the types of patients who are resident in the nursing homes and receive the care of the nurses employed there. This section provides some insight into the needs of nursing home residents. Finally, the nurses who provide care in nursing homes are discussed. Differences among them according to a variety of personal, employment and educational characteristics are examined.

#### a. Characteristics of Nursing Homes

In examining the utilization of registered nurses in nursing homes, it is important to study the nursing home facilities which employ RNs. There are several characteristics which are commonly used to categorize or classify nursing homes and they were the ones examined in this report. They are: ownership, chain affiliation, number of available beds, certification status, physician availability and participation in government programs. In addition, one variable which the literature suggests differentiates nursing homes--the number of services provided by the facility--was also included. The latter was derived from responses to a question which asked respondents to identify the services offered to residents of the facility from a prepared list of 17 selected services. Their responses were categorized according to the number of services offered. A measure of the legal requirements regarding RN employment in nursing homes in each state was also created.

(1) Ownership and Chain Affiliation

There were an estimated 19,070 nursing home facilities. These facilities were predominantly privately owned. Proprietary organizations owned and operated 75 percent of all nursing homes. Nonprofit organizations owned and operated 20 percent, and the government operated only 5 percent of all nursing home facilities (see Table 9).

The majority of nursing homes (53 percent) were independently owned and operated businesses. However, 38 percent of the nursing homes in the U.S. were affiliated with a chain of nursing homes. Seventeen percent of these affiliations were small operations, consisting of less than 10 affiliated nursing homes.

(2) Available Beds and Certification Status

Another characteristic which distinguished nursing homes was the size of the facility. This was measured by the number of available beds. Respondents were asked to identify the number of beds currently available for residents, including beds set up and staffed for use whether or not they were being used by residents at the time of the survey. Only a minority of facilities had 100 or more beds (33.7 percent). The predominant size was 50 or fewer beds, accounting for 37 percent of all nursing homes.

Certification status is an important way of classifying nursing homes. Nursing homes were classified according to their certification for participation in the Medicare and Medicaid programs. Since for skilled nursing facilities, the regulations were the same under Medicare and Medicaid, a facility could hold dual certification status as an SNF. A facility could also be classified as both a skilled nursing and intermediate care facility by allocating a specific number of beds to each certification status. Approximately 13 percent of nursing homes were certified as SNFs only, and an additional 30 percent were certified as both an SNF and ICF. Just over 27 percent of nursing homes were certified as ICFs only, and nearly one-fourth of all nursing homes were not certified as SNFs or ICFs by either of these government programs. Only 1.5 percent of nursing homes reported participation in the Medicare program alone. However, with 13.3 percent of nursing homes certified as SNFs only, it

Table 9. Number and percent distribution of nursing homes by selected nursing home characteristics.

| Nursing home characteristics | Estimate | | Standard error | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Total | 19,070 | 100.0 | 587 | 0.0 |
| **Ownership** | | | | |
| Proprietary | 14,298 | 75.0 | 668 | 2.0 |
| Voluntary non profit | 3,758 | 19.7 | 344 | 1.9 |
| Government | 1,014 | 5.3 | 149 | 0.8 |
| **Certification** | | | | |
| SNF only | 2,530 | 13.3 | 221 | 1.2 |
| SNF and ICF (both) | 5,721 | 30.0 | 244 | 1.6 |
| ICF only | 5,206 | 27.3 | 279 | 1.7 |
| Neither | 4,652 | 24.4 | 702 | 3.0 |
| Unknown | 961(*) | 5.0(*) | 291 | 1.5 |
| **Participation in government programs** | | | | |
| Medicare and Medicaid | 6,358 | 33.3 | 345 | 2.1 |
| Medicare only | 291(*) | 1.5(*) | 102 | 0.5 |
| Medicaid only | 7,768 | 40.7 | 323 | 2.2 |
| Neither | 4,652 | 24.4 | 702 | 3.0 |
| **Available beds** | | | | |
| 50 or less | 6,983 | 36.6 | 641 | 2.3 |
| 51-99 | 5,564 | 29.2 | 196 | 1.5 |
| 100-149 | 3,900 | 20.5 | 165 | 12.8 |
| 150-199 | 1,435 | 7.5 | 99 | 0.6 |
| 200 and over | 1,187 | 6.2 | 45 | 0.3 |
| **Affiliation** | | | | |
| Independent | 10,038 | 52.6 | 680 | 2.2 |
| Small chain (less than 10) | 3,253 | 17.1 | 242 | 1.4 |
| Medium chain (10-99) | 2,218 | 11.6 | 224 | 1.3 |
| Large chain (100 or more) | 2,054 | 10.8 | 175 | 1.0 |
| Government | 1,014 | 5.3 | 149 | 0.8 |
| Unknown | 492 | 2.6 | 101 | 0.5 |

(continued)

Table 9. (cont.)

| Nursing home characteristics | Estimate Number | Estimate Percent | Standard error Number | Standard error Percent |
|---|---|---|---|---|
| Number of services | | | | |
| Less than 11 | 4,978 | 26.1 | 729 | 3.2 |
| 11 to 12 | 4,256 | 22.3 | 349 | 2.0 |
| 13 to 14 | 7,039 | 36.9 | 421 | 2.4 |
| 15 or more | 2,797 | 14.7 | 277 | 1.5 |
| State minimum RN staffing requirement | | | | |
| RN all shifts | 1,062 | 5.6 | 112 | 0.6 |
| Full-time RN plus director of nursing is RN | 2,217 | 11.6 | 169 | 1.0 |
| Full-time RN | 2,607 | 13.7 | 224 | 1.2 |
| Director of nursing is RN | 3,314 | 17.4 | 267 | 1.5 |
| No full-time RN required | 9,869 | 51.8 | 670 | 2.2 |
| Physician availability | | | | |
| MD on premises at all times | 281(*) | 1.5(*) | 86 | 0.5 |
| MD on premises weekdays | 1,210 | 6.3 | 210 | 1.1 |
| MD on premises at scheduled times | 9,204 | 48.3 | 365 | 2.6 |
| MD on call only | 5,735 | 30.1 | 505 | 2.7 |
| Other | 1,908 | 10.0 | 696 | 3.4 |
| Unknown | 733 | 3.8 | 138 | 0.7 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: All nursing homes included in the National Nursing Home Survey.

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

suggests that the majority of those SNFs were certified jointly by both programs or by Medicaid alone.

(3) Number of services

The number of services offered might be used to identify nursing homes with greater emphasis on rehabilitative programs or indicate a greater commitment to providing a higher quality of care through an extended range of services. Most institutions offered 13-14 services (37 percent). While 15 percent offered more than 14 services, there were 48 percent who offered fewer than 13 of the selected services.

### (4) State RN Requirements

Achieving certification status requires that nursing homes follow the federal regulations associated with the certification. Among the specific regulations governing certification are the facility staffing requirements. These requirements dictate the minimum staffing standards for Federally certified SNFs and ICFs. Each state in turn sets its own guidelines. The states' regulations may be stricter than the federal regulations and thus require higher minimum staffing patterns. A federally certified facility cannot adhere to guidelines that are less strict than the federal standards if it wishes to retain its certification.

Determination of each state's minimum RN requirements for the staffing of SNFs and ICFs was made using two available publications (NGS, 1986; AHCA, 1984) and corroborating phone calls to individual states when the necessary information in the publications was ambiguous or missing. After reviewing the staffing requirements in the fifty states, a five level measure was created to describe the variations in RN requirements which existed among the states.

Each nursing home was assigned the code for the state in which it was located appropriate to the highest level of bed certification attained by the facility. More than half (51.8 percent) of all facilities had no minimum requirement to have even one full-time RN. The majority of these facilities were ICFs. SNFs were fairly evenly distributed among three of the five categories--RN all shifts, full-time RNs, and director of nursing is RN. The remaining category--one full-time RN in addition to an RN director of nursing--constituted about 12 percent of all SNFs. It is important to keep in mind that while a facility may be in a state without a strict RN staffing requirement, that facility is free to exceed the minimum requirement, especially if the federal requirement to be certified for Medicare or Medicaid program participation is higher.

### (5) Physician Availability

Fewer than two percent of the nursing homes had a physician available on the premises at all times. An additional six percent had a physician on premises during weekdays. Nearly half (48 percent) reported that a physician was available on premises but only at scheduled times. Thirty percent of nursing homes had only arranged for a physician to be on call, and another 10 percent had some other kind of arrangement.

### (6) Rates of Admission and Discharge

The rates of admission and discharge per 100 beds provide a guide to bed turnover and length of patient stay. The rates of admission and discharge per 100 beds in nursing homes were examined according to certification status and ownership. The highest rates occurred in nursing homes certified as SNFs (see Table 10). ICFs had just about half the rates of admission and discharge as did SNFs, suggesting a longer length of stay for patients in these facilities.

## b. Employment of Registered Nurses

In this section, the distribution of RNs employed by nursing homes is described according to selected characteristics of the nursing homes employing them. The nursing home characteristics used are the same as those used above to describe the distribution of nursing homes.

### (1) Ownership and Chain Affiliation

Fifty-seven percent of the estimated 99,707 RNs employed in nursing homes were employed in proprietary facilities, while nonprofit nursing homes employed only 31 percent (see Table 11). Government institutions employed just under 12 percent of the RNs employed in nursing homes. While the majority of RNs were employed in proprietary nursing homes, the 75 percent of nursing homes that were proprietary only employed slightly more than half of the nurses employed by nursing homes.

Nearly 45 percent of the nurses were employed by independent nursing homes, i.e., not government or chain affiliated. Overall, the distribution of nurse employment by nursing home affiliation status was fairly similar to the distribution of nursing homes. The largest proportional discrepancy involved the government facilities which constituted only 5 percent of the nursing homes but employed 12 percent of the RNs.

### (2) Certification and Available Beds

Nearly 80 percent of the RNs employed by nursing homes worked in facilities certified as SNFs (24 percent) or as combined SNFs and ICFs (56 percent). SNF or combined SNF and ICF certified nursing homes only represented 43 percent of the nursing homes in the nation. Nearly 6 percent of the nurses were employed in uncertified facilities. Almost 25 percent of the nursing homes were uncertified.

Nursing homes that participated in both the Medicare and Medicaid programs employed the largest number of RNs--61 percent. Those participating in Medicaid alone employed another 30 percent. Approximately 3 percent of RNs worked in nursing homes that only participated in the

Table 10. Annual admissions and discharges per 100 beds by certification status and ownership.

| | Certification Status | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | SNF only | | SNF & ICF | | ICF only | | Neither | | Unknown | |
| Ownership | Rate | SE | Rate | SE | Rate | SE | Rate | SE | Rate | SE | Rate | SE |
| **Admissions** | | | | | | | | | | | | |
| Total....... | 80 | 2.1 | 117 | 6.4 | 89 | 3.4 | 60 | 2.1 | 41 | 4.7 | 40 | 5.1 |
| Proprietary... | 86 | 2.1 | 118 | 5.4 | 99 | 3.0 | 63 | 2.4 | 45 | 5.6 | 43 | 5.8 |
| Nonprofit..... | 67 | 5.9 | 104 | 17.5 | 75 | 9.9 | 55 | 5.0 | 26 | 7.7 | 26 | 1.5 |
| Government.... | 65 | 10.0 | 131 | 47.9 | 54 | 6.1 | 46 | 5.0 | 50 | 12.0 | 21 | 1.9 |
| **Discharges** | | | | | | | | | | | | |
| Total...... | 74 | 2.1 | 110 | 6.5 | 80 | 3.3 | 56 | 2.3 | 40 | 4.7 | 34 | 5.9 |
| Proprietary.. | 80 | 2.0 | 112 | 5.5 | 90 | 3.0 | 59 | 2.6 | 44 | 6.0 | 36 | 6.8 |
| Nonprofit.... | 61 | 5.9 | 96 | 17.8 | 67 | 9.8 | 52 | 5.3 | 26 | 6.0 | 20 | 3.6 |
| Government... | 57 | 10.0 | 123 | 47.6 | 45 | 6.7 | 38 | 5.4 | 43 | 13.5 | 25 | 4.3 |

SOURCE: 1985 National Nursing Home Survey.
POPULATION: All nursing homes included in the National Nursing Home Survey.

Medicare program. Nursing homes that did not participate in either government program only employed 6 percent of the nurses employed by nursing homes. It is worth noting that nursing homes participating in both programs employed 61 percent of the RNs, but constituted only 33 percent of the facilities.

Approximately two-thirds of the nurses were employed by nursing homes with 100 beds or more. however, as noted earlier, only one-third of the nursing homes had 100 beds or more. The discrepancy between the distribution of nursing homes and nurses according to number of beds was even greater between the very small facilities (50 or few beds) and the very large ones (200 or more beds). While 37 percent of the nursing homes were very small, they employed only 9 percent of the nurses. On the other hand, the 6 percent of nursing homes that were very large employed 25 percent of the nurses.

Table 11. Number and percent distribution of RNs employed in nursing homes by selected nursing home characteristics.

| Nursing home characteristics | Estimate | | Standard Error | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Total | 99,707 | 100.0 | 3,098 | 0.0 |
| Ownership | | | | |
| Proprietary | 57,033 | 57.2 | 2,351 | 2.2 |
| Voluntary non-profit | 30,924 | 31.0 | 2,631 | 2.2 |
| Government | 11,751 | 11.8 | 1,560 | 1.5 |
| Certification | | | | |
| SNF only | 23,896 | 24.0 | 2,297 | 2.1 |
| SNF and ICF (both) | 55,718 | 55.9 | 2,493 | 2.2 |
| ICF only | 13,868 | 13.9 | 1,249 | 1.3 |
| Neither | 5,682 | 5.7 | 1,466 | 1.4 |
| Unknown | 543 | 0.5 | 254 | 0.3 |
| Participation in Government Programs | | | | |
| Medicare and Medicaid | 61,171 | 61.4 | 2,779 | 2.1 |
| Medicare only | 2,880 | 2.9 | 845 | 0.8 |
| Medicaid only | 29,975 | 30.1 | 1,915 | 1.9 |
| Neither | 5,682 | 5.7 | 1,466 | 1.4 |
| Available Beds | | | | |
| 50 or less | 8,587 | 8.6 | 1,161 | 1.1 |
| 51-99 | 25,133 | 25.2 | 1,897 | 1.6 |
| 100-149 | 24,972 | 25.0 | 1,621 | 1.6 |
| 150-199 | 16,248 | 16.3 | 1,492 | 1.4 |
| 200 and over | 24,767 | 24.8 | 1,618 | 1.4 |
| Affiliation | | | | |
| Independent | 43,520 | 43.6 | 2,739 | 2.7 |
| Small chain (less than 10) | 18,707 | 18.8 | 1,791 | 1.8 |
| Medium chain (10-99) | 11,164 | 11.2 | 1,322 | 1.3 |
| Large chain (100 or more) | 12,890 | 12.9 | 1,228 | 1.2 |
| Government | 11,751 | 11.8 | 1,560 | 1.5 |
| Unknown | 1,675 | 1.7 | 462 | 0.4 |
| Number of Services | | | | |
| Less than 11 | 7,509 | 7.5 | 1,479 | 1.4 |
| 11 to 12 | 18,528 | 18.6 | 1,493 | 1.5 |
| 13 to 14 | 50,400 | 50.5 | 2,611 | 2.2 |
| 15 or more | 23,270 | 23.3 | 2,152 | 2.0 |

Table 11 (cont.)

| Nursing home characteristics | Estimate |  | Standard Error |  |
|---|---|---|---|---|
|  | Number | Percent | Number | Percent |
| State Minimum RN Staffing Requirement |  |  |  |  |
| RN all shifts | 13,088 | 13.1 | 1,594 | 1.5 |
| Full-time RN plus director of nursing as RN | 23,768 | 23.8 | 1,930 | 1.8 |
| Full-time RN | 25,138 | 25.2 | 2,014 | 1.9 |
| Director of nursing is RN | 16,743 | 16.8 | 1,675 | 1.6 |
| No full-time RN required | 20,970 | 21.0 | 2,025 | 1.9 |
| Physician Availability |  |  |  |  |
| MD on premises at all times | 4,589 | 4.6 | 1,159 | 1.1 |
| MD on premises weekdays | 15,708 | 15.8 | 1,785 | 1.7 |
| MD on premises at scheduled times | 56,562 | 56.7 | 2,774 | 2.2 |
| MD on call only | 14,673 | 14.7 | 1,448 | 1.4 |
| Other | 2,498 | 2.5 | 605 | 0.6 |
| Unknown | 5,677 | 5.7 | 1,010 | 1.0 |

SOURCE: 1985 National Nursing Home Survey
POPULATION: All nursing homes included in the National Nursing Home survey.

(3) Number of Services

The number of nurses employed in a nursing home increased with the number of services the facility provided to residents. While almost half of the nursing homes reported offering residents 12 or fewer services, these facilities employed just over a quarter of the nurses. The 15 percent of nursing homes providing 15 or more services to residents employed almost 25 percent of the nurses.

(4) State RN Requirements

As might be expected, the number of nurses employed in nursing homes was greater in homes located in states where the minimum RN staffing requirement was higher. More than 50 percent of nursing homes surveyed had no requirement regarding the employment of a full-time registered nurse, and those facilities employed only 21 percent of the nurses. Where at least one full-time RN was required--about 30 percent of the facilities--that's where more than 60 percent of the nurses were employed.

(5) Physician Availability

Only 20 percent of the nurses were employed in nursing homes where a physician was available on the premises during weekdays or at all times. However only 8 percent of the nursing homes had such ready physician availability. The vast majority of RNs (57 percent) were employed by nursing homes in which a physician was available on the premises but only at scheduled times. Nearly half (48 percent) of the nursing homes reported this kind of arrangement for physician services. Fifteen percent of nurses were employed in nursing homes where physicians were on-call only. Thirty percent of nursing homes had physician's services available on an on-call basis only.

c. Patient Characteristics

Patient characteristics refer to the characteristics of the residents of the nursing homes at the time of the survey. The data for the current resident questionnaire were obtained by interviewing the staff person most familiar with the resident. The characteristics examined were age, race, whether there were any living children, marital status, length of stay, physical health status, mental health status, behavioral problems, impaired memory status, and source of payment for the first month of admission.

(1) Behavioral Problems and Memory Impairment

The behavioral problems measure was based on an item in the questionnaire which listed six disruptive behaviors. The measure was created from a count of the number of behaviors checked. The values were combined to form a four level measure--none, few (one or two), some (three or four) or many (five or more).

The memory impairment measure was based on an item that listed four indicators of memory impairment or disorientation. The values of the measure created were based on the number of indicators checked. They were combined to form a three level measure--okay (no indicators checked), some (one or two), or much (three or four).

(2) Age, Race and Family Status

There were an estimated 1,491,446 residents in the 19,070 U.S. nursing homes during 1985. The age of the residents reflected the increasing longevity of the elderly--42 percent of all nursing home residents were 85 years of age or older (see Table 12). Residents were

Table 12. Number and percent distribution of current nursing home residents by selected patient characteristics.

| Patient characteristics | Estimate |  | Standard error |  |
|---|---|---|---|---|
|  | Number | Percent | Number | Percent |
| Total | 1,491,446 | 100.0 | 16,691 | 0.0 |
| **Age** |  |  |  |  |
| 64 and under | 163,266 | 11.0 | 9,538 | 0.6 |
| 65-74 | 205,583 | 13.8 | 8,103 | 0.5 |
| 75-84 | 484,701 | 32.5 | 12,319 | 0.7 |
| 85 and over | 635,551 | 41.6 | 13,689 | 0.8 |
| Unknown | 2,346(*) | 0.2(*) | 1,023 | 0.1 |
| **Race** |  |  |  |  |
| White | 1,374,620 | 92.2 | 17,480 | 0.7 |
| Black | 104,370 | 7.0 | 9,856 | 0.6 |
| Other | 12,456 | 0.8 | 2,788 | 0.2 |
| **Marital status** |  |  |  |  |
| Married | 188,221 | 12.6 | 7,720 | 0.5 |
| Previously married | 1,000,592 | 67.1 | 17,237 | 0.8 |
| Never married | 271,416 | 18.2 | 10,887 | 0.7 |
| Unknown | 31,217 | 2.1 | 3,882 | 0.3 |
| **Any living children** |  |  |  |  |
| Yes | 886,218 | 59.4 | 15,997 | 0.3 |
| No | 526,561 | 35.3 | 12,893 | 0.8 |
| Unknown | 78,667 | 5.3 | 6,050 | 0.4 |
| **Length of stay** |  |  |  |  |
| Less than 1 year | 543,599 | 36.4 | 13,438 | 0.8 |
| 1-<2 years | 284,646 | 19.1 | 9,742 | 0.6 |
| 2-<3 years | 185,044 | 12.4 | 7,456 | 0.5 |
| 3-<4 years | 118,002 | 7.9 | 6,448 | 0.4 |
| 4 or more years | 360,154 | 24.1 | 12,454 | 0.8 |
| **Physical health status** |  |  |  |  |
| Excellent | 40,727 | 2.7 | 4,931 | 0.3 |
| Good | 531,098 | 35.6 | 15,45 | 0.9 |
| Fair | 643,513 | 43.1 | 14,336 | 0.9 |
| Poor | 238,938 | 16.0 | 9,807 | 0.6 |
| Unknown | 37,170 | 2.5 | 6,477 | 0.4 |
| **Mental health status** |  |  |  |  |
| Excellent | 53,464 | 3.6 | 6,148 | 0.4 |
| Good | 404,096 | 27.1 | 12,362 | 0.8 |
| Fair | 554,403 | 37.2 | 13,746 | 0.8 |
| Poor | 428,972 | 28.8 | 12,206 | 0.8 |
| Unknown | 50,511 | 3.4 | 6,928 | 0.5 |

Table 12. (cont.)

| Patient characteristics | Estimate Number | Estimate Percent | Standard error Number | Standard error Percent |
|---|---|---|---|---|
| Behavioral problems | | | | |
| None | 906,181 | 60.8 | 17,457 | 1.0 |
| Few | 459,587 | 30.8 | 14,155 | 0.9 |
| Some | 100,529 | 6.7 | 5,879 | 6.7 |
| Many | 12,490 | 0.8 | 2,163 | 0.1 |
| Unknown | 12,658 | 0.8 | 3,505 | 0.2 |
| Memory status impaired | | | | |
| Okay | 550,849 | 36.9 | 15,515 | 36.9 |
| Some | 285,277 | 19.1 | 9,959 | 19.1 |
| Much | 637,267 | 42.7 | 15,179 | 0.9 |
| Unknown | 18,054 | 1.2 | 4,088 | 0.3 |
| Source of payment for first month of admission | | | | |
| Own income | 659,186 | 44.2 | 18,564 | 1.1 |
| Medicare | 60,506 | 4.1 | 5,712 | 0.4 |
| Medicaid | 572,709 | 38.4 | 16,397 | 1.1 |
| Other government | 69,184 | 4.6 | 7,738 | 0.5 |
| Other | 22,673 | 1.5 | 4,936 | 0.3 |
| Unknown | 107,187 | 7.2 | 6,198 | 0.4 |

SOURCE: 1985 National Nursing Home Survey.
POPULATION: Current residents in nursing homes.
NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

almost always white (92 percent). The remaining 8 percent were comprised of blacks (7 percent) and less than 1 percent of all other races (Asian and Pacific Islanders, American Indians and Alaskan natives). Nursing home residents frequently had living children (59 percent), but were not likely to have a living spouse (13 percent). It is likely that, given the great number of residents who were 85 years of age and older, the living children were themselves old or at least in the upper range of middle age.

### (3) Length of Stay and Health Status

Approximately 36 percent of current nursing home residents reported being in the facility less than a year. Some of these residents probably came for short-term rehabilitation and would be discharged soon after treatment or were acutely or terminally ill and either were discharged or died in a short time.

Another group of residents were those with chronic problems, including mental health problems, that required the support of a nursing home, probably for the rest of the resident's life. This was suggested by the data on physical and mental health status. More than 38 percent of nursing home residents were actually in good or excellent physical health, and only 16 percent were in poor health. The majority fell in the middle, probably suffering from chronic illnesses which may leave them with some functional dependencies. However, a total of 66 percent of nursing home residents were in fair or poor mental health status, and 42 percent suffered from three or four indicators of memory impairment. The fact that most nursing home residents were not terribly ill or in failing health suggests that rather than requiring therapeutic care, they required supportive care.

### (4) Source of Payment

The source of payment in the first month after admission was overwhelmingly either the patient's own income or Medicaid. Very few patients were covered by Medicare or other sources. The fact that 38 percent of all admissions within the first month were Medicaid reimbursed is significant for policy considerations. These individuals may continue to be sustained by Medicaid for the rest of their life, which as the data shows maybe several years in the nursing home. Those patients who start out with their own income frequently spend-down to eligibility for Medicaid which implies that the potential pool of Medicaid recipients may be much greater than 38 percent.

## d. RN Characteristics

The purpose of this section is to describe from the National Nursing Home Survey differences that exist in the population of RNs employed by nursing homes. This section addresses personal, employment, and educational characteristics of nursing home nurses. Later sections will compare the employment of nurses according to these various characteristics.

### (1) Demographic Characteristics

The "typical" RN employed in a nursing home was generally white, married and had no children living at home (see Table 13). The age range was most likely between 35 and 54 years of age. Only three

Table 13. Number and percent distribution of the registered nurses employed in nursing homes according to selected personal characteristics.

| Personal characteristics | Estimate |  | Standard error |  |
|---|---|---|---|---|
|  | Number | Percent | Number | Percent |
| Total | 99,707 | 100.0 | 3,098 | 0.0 |
| **Age** |  |  |  |  |
| Under 35 | 21,769 | 21.8 | 1,224 | 1.1 |
| 35 to 44 | 25,253 | 25.3 | 1,264 | 1.1 |
| 45 to 54 | 27,116 | 27.2 | 1,492 | 1.1 |
| 55 to 64 | 21,193 | 21.3 | 1,251 | 1.0 |
| 65 and over | 3,536 | 3.5 | 497 | 0.5 |
| Unknown | 841 | 0.8 | 196 | 0.2 |
| **Race** |  |  |  |  |
| White | 88,438 | 88.7 | 2,960 | 1.0 |
| Black | 4,243 | 4.3 | 632 | 0.6 |
| All other | 6,444 | 6.5 | 846 | 0.8 |
| **Marital status** |  |  |  |  |
| Married | 68,356 | 68.6 | 2,375 | 1.1 |
| Divorced/separated | 14,895 | 14.9 | 971 | 0.9 |
| Widowed | 5,924 | 5.9 | 551 | 0.5 |
| Never married | 10,016 | 10.0 | 957 | 0.9 |
| Unknown | 516(*) | 0.5(*) | 158 | 0.2 |
| **Age of youngest child** |  |  |  |  |
| One or more under 6 years old | 13,992 | 14.0 | 990 | 0.9 |
| All 6 to 18 years old | 33,415 | 33.5 | 1,514 | 1.2 |
| No children | 51,856 | 52.0 | 2,181 | 1.3 |
| Unknown | 444(*) | 0.4(*) | 153 | 0.2 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

percent were 65 years of age or older. An estimated 47.5 percent had children at home under eighteen years of age.

Thirty-five percent of the nurses in nursing homes were employed part-time (see Table 14). This pattern may be influenced by the availability of child care, including after-school programs. Indeed, it is

Table 14. Number and percent distribution of the registered nurses employed in nursing homes according to selected job characteristics.

| RN employment characteristics | Estimate |  | Standard error |  |
|---|---|---|---|---|
|  | Number | Percent | Number | Percent |
| Total.............. | 99,707 | 100.0 | 3,098 | 0.0 |
| Description of position |  |  |  |  |
| General nursing.......... | 58,372 | 58.5 | 2,539 | 1.2 |
| Specialized nursing...... | 3,145 | 3.2 | 399 | 0.4 |
| Nursing supervisor....... | 35,510 | 35.6 | 1,271 | 1.2 |
| Other.................... | 1,363 | 1.4 | 281 | 0.3 |
| Unknown.................. | 1,318 | 1.3 | 308 | 0.3 |
| Employment |  |  |  |  |
| Full-time................ | 60,624 | 60.8 | 2,328 | 1.4 |
| Part-time................ | 34,796 | 34.9 | 1,739 | 1.3 |
| Unknown.................. | 4,287 | 4.3 | 482 | 0.5 |
| Years worked for pay |  |  |  |  |
| Less than 5.............. | 16,042 | 16.1 | 983 | 0.9 |
| 5 to 9................... | 14,054 | 14.1 | 905 | 0.8 |
| 10 to 19................. | 32,650 | 32.7 | 1,624 | 1.2 |
| 20 to 29................. | 22,704 | 22.8 | 1,467 | 1.1 |
| 30 or more............... | 13,370 | 13.4 | 860 | 0.8 |
| Unknown.................. | 887 | 0.9 | 215 | 0.2 |
| Principal shift |  |  |  |  |
| Rotate shifts............ | 8,926 | 9.0 | 805 | 0.8 |
| Day shift................ | 53,447 | 53.6 | 1,765 | 1.2 |
| Evening shift............ | 16,889 | 16.9 | 1,133 | 0.9 |
| Night shift.............. | 15,280 | 15.3 | 1,049 | 0.9 |
| Unknown.................. | 5,165 | 5.2 | 535 | 0.5 |
| Other employment as nurse? |  |  |  |  |
| Yes...................... | 11,900 | 11.9 | 888 | 0.9 |
| No....................... | 86,580 | 86.8 | 2,933 | 0.9 |
| Unknown.................. | 1,299 | 1.3 | 295 | 0.3 |

(continued)

Table 14. (continued).

| RN employment characteristics | Estimate Number | Estimate Percent | Standard error Number | Standard error Percent |
|---|---|---|---|---|
| Weekly salary (part- and full-time) | | | | |
| Less than $300.00 | 34,298 | 34.4 | 1,854 | 1.3 |
| $300.00-$399.99 | 25,679 | 25.8 | 1,269 | 1.1 |
| $400.00-$499.99 | 17,250 | 17.3 | 1,063 | 1.0 |
| $500.00 and over | 11,214 | 11.2 | 1,049 | 1.0 |
| Unknown | 11,267 | 11.3 | 835 | 0.8 |
| Weekly salary (full-time only) | | | | |
| Total | 60,624 | 100.0 | 2,328 | 0.0 |
| Less than $300.00 | 5,739 | 9.5 | 940 | 1.4 |
| $300.00-$399.99 | 21,726 | 35.8 | 1,198 | 1.6 |
| $400.00-$499.99 | 16,272 | 26.8 | 1,046 | 1.5 |
| $500.00 and over | 10,287 | 17.0 | 984 | 1.5 |
| Unknown | 6,600 | 10.9 | 612 | 1.0 |

SOURCE: 1985 National Nursing Home Survey.
POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

significant that only 60 percent of the workforce was employed on a full-time basis. At the same time, however, only 12 percent of the workforce had additional employment as an RN.

(2) Employment Status and Salary

As would be expected, most nurses worked on the day shift. This is the time when there is the most patient care to be supervised and delivered. Nurses employed in nursing homes can hold any one of a number of different positions. Nurses were asked to select from a list of 10 types of positions the one that best described their position in the facility. These 10 positions were then collapsed in the following way: (1) general nursing (staff nurse, charge nurse and head or assistant head nurse); (2) specialized nursing (clinical nursing specialist, nurse practitioner and inservice instructor or educator), (3) nursing supervisor (supervisor or assistant, director or assistant director of nursing or administrator) and (4) other.

The data indicated that more RNs were used to provide general nursing care and supervise ancillary staff than in any other capacity (see Table 14). A substantial group of nurses held supervisory positions (36 percent), while only a very small fraction considered themselves specialists.

Nurses employed in nursing homes had considerable nursing experience. Only 16 percent had been employed in nursing less than five years, but almost 60 percent had worked for pay as a nurse for 10 or more years. Almost 10 percent of full-time nurses employed in nursing homes made less than $300/week. This was the same salary category in which 24 percent of part-time nurses fell. Most nurses fell in the lower end of the salary range averaging $300-$399 a week. Only 17 percent made $500 a week or more.

### (3) Educational Preparation and Nursing Experience

Nursing homes predominantly employed nurses with diplomas (57 percent) probably reflecting the older age of the nurses in nursing homes (see Table 15). Over 13 percent had baccalaureate degrees in nursing. A little over 4,000 nurses reported receiving additional geriatric education. Eighty percent of the nurses attended continuing education courses in the year before the survey, and 63 percent attended continuing education courses over the year that dealt with two or more different areas.

## 5. Variations in Registered Nurse Employment in Nursing Homes

In this section, potential sources of variation in the utilization of registered nurses by nursing homes are investigated. In particular, three sources of variation were considered--characteristics of the nursing homes and their environment, characteristics of the current residents in the nursing homes and characteristics of the nurses employed in nursing homes. The data used in the following analysis were obtained from the 1985 National Nursing Homes Survey.

Two measures of nurse utilization were created from the survey. While they were created independently (from different items), the measures were based on the same basic information. One was based on the total number of hours worked by registered nurses in the nursing home during the previous week. The other was based on the number of full-time equivalent (FTE) registered nurses employed in the nursing home during the previous week.

Table 15. Number and distribution of the registered nurses employed in nursing homes according to selected educational characteristics.

| Educational characteristics | Estimate | | Standard error | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Total............... | 99,707 | 100.0 | 3,098 | 0.0 |
| Highest educational preparation | | | | |
| Associate degree......... | 21,843 | 21.9 | 1,205 | 1.1 |
| Diploma.................. | 56,814 | 57.0 | 2,255 | 1.1 |
| Baccalaureate in nursing. | 13,281 | 13.3 | 1,022 | 0.9 |
| Other.................... | 7,227 | 7.2 | 747 | 0.7 |
| Unknown.................. | 541(*) | 0.5(*) | 153 | 0.2 |
| Additional geriatric education | | | | |
| Yes...................... | 4,047 | 4.1 | 506 | 0.5 |
| No....................... | 95,133 | 95.4 | 3,000 | 0.5 |
| Unknown.................. | 527(*) | 0.5(*) | 181 | 0.2 |
| Number of areas of continuing education courses | | | | |
| None..................... | 20,068 | 20.1 | 1,291 | 1.1 |
| 1........................ | 16,873 | 16.9 | 1,062 | 0.9 |
| 2 or 3................... | 27,996 | 28.1 | 1,407 | 1.1 |
| 4 or 5................... | 17,586 | 17.6 | 1,104 | 1.0 |
| 6 or more................ | 17,185 | 17.2 | 1,181 | 1.1 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Thirty-five hours of part-time nurse employment were considered the equivalent of a full-time nurse, a definition used by the National Center for Health Statistics (Strahan, 1987).

Reason suggests, and previous research confirms, that the number of FTE nurses and hours of nurse employment will vary directly with, among other things, the size of the nursing home. To examine the association of other measures of interest with the utilization of nurses, the size of the nursing home needed to be controlled or standardized in the some way. In this report, the measures of nurse utilization have been standardized according to two indicators of nursing home size.

The size of nursing homes can be gauged in a number of ways. Included among them are counts of (1) the number of beds available for patients, (2) the number of patients in current residence, (3) the number of patient days of occupancy, (4) the number of nursing personnel employed, as well as many other indicators that are conceptually and empirically related to these. Two measures were selected for use in the standardizations in this report--the number of inpatient days of care provided by the nursing home in the past year, and the number of FTE nursing personnel employed by the nursing home during the previous week. Two ratios were created by dividing each measure of nurse utilization--the number of RN hours and number of FTE nurses--by a different indicator. To form the first ratio--intensity of nurse utilization--the annualized number of registered nurse hours of employment was divided by the number of inpatient days reported for the previous year. The second ratio--level of nurse employment--was formed by dividing the number of FTE registered nurses employed in the nursing home by the number of FTE nursing personnel (RNs, LPNs, aides and orderlies) employed there.

In the analysis that follows, each of these ratios has been presented in a tabular format as a series of discrete categories cross-tabulated with selected nursing home, current resident and nurse characteristics. In cross-tabulating these standardized measures of nurse utilization with other nursing home characteristics, it was expected to reveal the extent to which the intensity and level of nurse employment were related to nursing home characteristics other than size. Tabulating nurse utilization according to characteristics of nursing home residents was intended to highlight variations in RN staffing that might be associated with the special needs of patients. By cross-tabulating the utilization ratios with nurse characteristics, we investigated the extent to which the types of nurses employed in nursing homes varied with the intensity and level of registered nurse employment.

### a. Nursing Home Characteristics and the Intensity of RN Utilization

Seven thousand four hundred and two, or nearly 40 percent of the estimated 19,070 nursing homes had one-tenth of an hour or less of registered nurse time available per patient per day (see Table 16). An

Table 16. Number and percent of nursing homes by selected nursing home characteristics and intensity of RN utilization.

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 19,070 | 100.0 | 7,402(**) | 38.8 | 5,383 | 28.2 | 3,804 | 19.9 | 2,481 | 13.0 |
| **Ownership** | | | | | | | | | | |
| Proprietary... | 14,298 | 100.0 | 6,578 | 46.0 | 3,856 | 27.0 | 2,443 | 17.1 | 1,421 | 10.0 |
| Nonprofit..... | 3,758 | 100.0 | 638 | 17.0 | 1,234 | 32.8 | 979 | 26.0 | 907 | 24.2 |
| Government.... | 1,014 | 100.0 | 186(*) | 18.3(*) | 293(*) | 28.9(*) | 383 | 37.7 | 153 | 15.1 |
| **Affiliation** | | | | | | | | | | |
| Independent... | 10,038 | 100.0 | 4,872 | 48.5 | 2,103 | 21.0 | 1,721 | 17.1 | 1,343 | 13.4 |
| Chain-small... | 3,253 | 100.0 | 1,082 | 33.3 | 991 | 30.5 | 743 | 22.8 | 437 | 13.4 |
| Chain-medium.. | 2,218 | 100.0 | 723 | 32.6 | 867 | 39.1 | 415 | 18.7 | 214(*) | 9.6(*) |
| Chain-large... | 2,054 | 100.0 | 376 | 18.3 | 946 | 46.0 | 483 | 23.5 | 249(*) | 12.1(*) |
| Government.... | 1,014 | 100.0 | 186(*) | 18.3(*) | 293(*) | 28.9(*) | 383 | 37.7 | 153 | 15.1 |
| Unknown....... | 492 | 100.0 | 164(*) | 23.3(*) | 183(*) | 37.2(*) | 60(*) | 12.2(*) | 84(*) | 17.1(*) |
| **Available beds** | | | | | | | | | | |
| 50 or less..... | 6,983 | 100.0 | 4,628 | 66.3 | 1,020(*) | 14.6(*) | 880(*) | 12.6(*) | 455(*) | 6.5(*) |
| 51 to 99....... | 5,564 | 100.0 | 1,447 | 26.0 | 2,042 | 36.7 | 1,184 | 21.3 | 892 | 16.0 |
| 100 to 149..... | 3,900 | 100.0 | 944 | 24.2 | 1,387 | 35.6 | 964 | 24.7 | 605 | 15.5 |
| 150 to 199..... | 1,435 | 100.0 | 198(*) | 13.8(*) | 555 | 38.7 | 432 | 30.1 | 249 | 17.3 |
| 200 and over.. | 1,187 | 100.0 | 185 | 15.5 | 379 | 31.9 | 343 | 28.9 | 280 | 23.6 |
| **Number of services** | | | | | | | | | | |
| Less than 11.. | 4,978 | 100.0 | 3,132 | 62.9 | 1,227 | 24.6 | 419(*) | 8.4(*) | 200(*) | 4.0(*) |
| 11 to 12...... | 4,256 | 100.0 | 1,592 | 37.4 | 1,172 | 27.5 | 964 | 22.7 | 528 | 12.4 |
| 13 to 14...... | 7,039 | 100.0 | 1,858 | 26.4 | 2,125 | 30.2 | 1,890 | 26.9 | 1,166 | 16.6 |
| 15 or more.... | 2,797 | 100.0 | 820 | 29.3 | 859 | 30.7 | 531 | 19.0 | 586 | 21.0 |

(continued)

Table 10. (Continued).

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Certification | | | | | | | | | | |
| Skilled nursing only.... | 2,530 | 100.0 | 217(*) | 8.6(*) | 864 | 34.2 | 743 | 29.4 | 706 | 27.9 |
| Skilled and intermediate........ | 5,721 | 100.0 | 339 | 5.9 | 2,147 | 37.5 | 2,053 | 35.9 | 1,182 | 20.7 |
| Intermediate care only... | 5,206 | 100.0 | 2,373 | 45.6 | 1,645 | 31.6 | 887 | 17.0 | 300(*) | 5.8(*) |
| Neither....... | 4,652 | 100.0 | 3,654 | 78.5 | 631(*) | 13.6(*) | 111(*) | 2.4(*) | 256(*) | 5.5(*) |
| Unknown....... | 961(*) | 100.0(*) | 820(*) | 85.3(*) | 95(*) | 9.9(*) | 10(*) | 1.1(*) | 36(*) | 3.7(*) |
| MD availability | | | | | | | | | | |
| MD on premises at all times | 281 | 100.0 | 0(*) | 0.0(*) | 67(*) | 23.9(*) | 8(*) | 2.7(*) | 206(*) | 73.4(*) |
| MD on premises weekdays | 1,210 | 100.0 | 251(*) | 20.7(*) | 400(*) | 33.0(*) | 313 | 25.9 | 247 | 20.4 |
| MD on orenuses at at scheduled times | 9,204 | 100.0 | 2,303 | 25.0 | 3,150 | 34.2 | 2,546 | 27.7 | 1,206 | 13.1 |
| MD oncall only | 5,735 | 100.0 | 3,075 | 53.6 | 1,428 | 24.9 | 683 | 11.9 | 549 | 9.6 |
| Other | 1,906 | 100.0 | 1,579(*) | 82.8(*) | 152(*) | 8.0(*) | 71(*) | 3.7(*) | 106(*) | 5.6(*) |
| Unknown | 733 | 100.0 | 195 | 26.6 | 187 | 25.5 | 184 | 25.1 | 167 | 22.8 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: All nursing homes included in the National Nursing Home Survey.

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes 4,304 facilities that reported no registered nurse hours worked during the previous week.

estimated 2,507 of these low RN intensity facilities reported no nursing hours worked by RNs, LPNs or aides and orderlies during the previous week. Another 1,697 nursing homes reported having hours worked by LPNs and aides or orderlies but not by RNs.

The median amount of registered nurse time available per patient per day across all nursing homes was just over two-tenths of an hour. This means that half of the nursing homes had approximately 12 minutes or less of registered nurse time available per patient per day.

### (1) Ownership and Affiliation

Proprietary nursing homes had a lower intensity of registered nurse utilization than was true of nonprofit and government operated nursing homes. While 46.0 percent of the estimated 14,298 proprietary nursing homes had one-tenth of an hour or less of RN time per patient per day, less than 20 percent of the estimated 3,758 nonprofit (17.0 percent) and 1,014 government nursing homes (18.3 percent) reported having one-tenth of an hour or less registered nurse time available. Approximately 30 percent of the nursing homes, regardless of ownership, had between one and three-tenths of an hour of nurse time available per patient per day. More than half of the nonprofit (50.2 percent) and government (52.8) nursing homes had three-tenths of an hour or more of RN time available per patient per day, compared to only 27.1 percent of the proprietary nursing homes.

Independent nursing homes made less intense use of registered nurses than chain or government operated nursing homes. Almost half (48.5 percent) of the 10,038 independent nursing homes had less than one-tenth of an hour of registered nurse time available per patient per day. This was in marked contrast to the estimated 2,054 large chain-affiliated nursing homes with 100 or more affiliate facilities, of which only 18.3 percent had less than one-tenth of an hour of nurse time per patient per day. The situation reversed itself for nursing homes with from one- to three-tenths of an hour of registered nurse time available per patient per day. Among large chain nursing homes, 46.0 percent had between one- and three-tenths of an hour of available RN time, as compared to independent nursing homes, of which only 21.0 percent had that amount of nurse time available.

### (2) Number of Beds, Services Available and Certification Status

Despite efforts to standardize the measure of nurse utilization by controlling on the size of the nursing home, the number of available beds still retained a strong association with the intensity of RN utilization. Almost two-thirds of the estimated 6,983 nursing homes with 50 or fewer beds had less than one-tenth of an hour of RN time available per patient per day, as compared to one-fourth of the nursing homes with from 51 to 149 beds, and less than 15 percent of nursing homes with 150 or more beds. As the number of beds increased, so also did the proportion of nursing homes having more RN time available per patient per day. In fact, nearly one-fourth (23.6 percent) of the nursing homes with 200 or more beds reported half an hour or more of RN time available per patient per day as compared to only 6.5 percent of those with 50 or fewer beds.

Nursing home administrators in the national survey were asked to indicate which of the 17 services on a list were offered to residents of their facility. The services on the list included: medical services from a physician, osteopath or physician associate; health services from some other licensed professional; nursing services; mental health services; physical therapy; speech or hearing therapy; occupational therapy; special education; personal care; social services; nutritional services; hospice services; sheltered employment; vocational rehabilitation; transportation; medicine; and equipment or devices. A measure of the comprehensiveness of care offered was created by summing the number of services the administrator indicated were offered. Of the estimated 4,978 nursing homes offering fewer than 11 of the above services, 62.9 percent had less than one-tenth of an hour of RN time per patient per day. As one might expect, the proportion of nursing homes with more registered nurse time available increased with the availability of more services.

The intensity of RN utilization varied directly with the nursing home's certification status. More than three quarters (78.5 percent) of the estimated 4,652 nursing homes not certified as a skilled nursing facility (SNF) by Medicare or Medicaid and not certified by Medicaid as an intermediate care facility (ICF) had less than one-tenth of an hour of RN time available per patient per day. Fewer than 10 percent of the 8,251 Medicare and Medicaid certified skilled nursing facilities, even those also having Medicaid certified intermediate care beds, had as little as one-tenth of an hour of RN time available per patient per day. More than 55 percent of the SNF certified facilities had three-tenths or more RN hours available per patient per day. Nursing homes certified as ICFs only by Medicaid had an intermediate intensity of nurse utilization.

(3) Nurse Staffing Patterns

Just as there was more nurse time available per patient per day as the number of beds in the nursing home increased, so also did the RN time per patient per day increase with increments in the number of full-time equivalent registered nurses employed by the nursing home. An estimated 5,681 nursing homes employed less than one FTE nurse, and 92.9 percent of these had less than one-tenth hour of RN time available per patient per day. Of the 6,347 nursing homes employing five or more FTE registered nurses, only three percent had as small an amount of RN time available as one-tenth hour per patient per day. In contrast, while only 0.6 percent of the nursing homes with less than one FTE nurse employed had half an hour or more of nurse time available per patient per day, 25.7 percent of the nursing homes employing five but less than 10 FTE nurses, and 46.0 percent of the nursing homes employing 10 or more FTE nurses, had that much RN time available.

The intensity of registered nurse utilization in nursing homes varied directly with the intensity of licensed practical nurse utilization. More than 60 percent (62.4 percent) of the 7,842 nursing homes with a low LPN utilization intensity, i.e., less than three-tenths of an hour of LPN time available per patient, had a low intensity of RN utilization, i.e., less than one-tenth of an hour of RN time available per patient. However, more than 35 percent (36.5 percent) of the 2,208 nursing homes with a high intensity of LPN utilization i.e., seven-tenths of an hour or more of LPN time available per inpatient per day, had a high intensity of RN utilization a well, i.e., half an hour or more of RN time available per patient per day. This apparent relationship may be altered when the effect of facility size and other staffing such as aides and orderlies are considered.

The intensity of RN utilization also increased as the intensity of aide utilization increased. Almost three-fourths (72.4 percent) of the 6,630 nursing homes with less than 1.4 aide hours available per patient per day (low intensity use of aides) had less than one-tenth of an hour of RN time available per patient per day (low RN utilization intensity). However, 33.2 percent of the 3,754 nursing homes with 2.2 or more aide hours available (high aide intensity of use) also reported having half an hour or more of RN time available per patient per day (high RN use intensity).

#### (4) State RN Requirements

There was a very strong and clear relationship between a state's nursing home RN requirements and the intensity of RN utilization in that state's nursing homes. There was a sharp distinction in the use of RNs between nursing homes in states requiring an RN on all shifts or a full-time RN and a director of nursing, and nursing homes in states with a lower registered nurse requirement for nursing homes. Nearly 80 percent of the 1,062 nursing homes required to have an RN on all shifts had three-tenths of an hour or more of RN time available per patient per day, in comparison to only 16 percent of the 9,869 nursing homes having no state RN requirements to meet. A similar pattern, but in reverse, existed with respect to the proportion of nursing homes under the various RN requirements that had less than one-tenth of an hour of RN time available per patient per day. Almost two-thirds of the nursing homes with no requirements had this amount of time available whereas only one percent of the nursing homes required to have an RN on all shifts had so little RN time available.

### b. Characteristics of Nursing Home Residents and Intensity of RN Utilization

In the previous section, it was noted that approximately 40 percent of nursing homes were characterized as having less than one-tenth of an hour of nurse time available per patient per day and that these nursing homes characterized by low RN intensity of use were also the place where 24 percent of nursing home patients resided. At the opposite end of the continuum of nurse utilization intensity--half an hour or more of registered nurse time available per person per day--there was 17 percent of the nursing homes.

#### (1) Age and Race

The age of nursing home patients was somewhat related to the intensity of nurse utilization in the nursing home in which they resided. Thirty-nine percent of current residents under 65 years of age were in nursing homes with less than one-tenth of an hour of RN time available per patient per day, whereas only about 19 percent of the patients 85 years of age and older were in nursing homes with such a low intensity of RN utilization. In nursing homes falling in the middle range of RN hours per inpatient day--.100 to .499--the difference in where patients of different ages resided was wider. While 43 percent of patients under 65 years of age resided in nursing homes characterized by a moderate intensity of RN utilization, more than 60 percent of the patients 65 and over were in such nursing homes.

There was also a slight tendency for the intensity of nurse utilization in nursing homes to vary according to the race of the residents. More than 31 percent of nonwhite patients resided in nursing homes with less than one-tenth of an hour of nurse time available, as compared to only 23 percent of white patients. However, 26 percent of white patients but only 17 percent of nonwhite patients, were in nursing homes with from .300 to .499 RN hours available per patient per day.

### (2) Marital Status and Living Children

The marital status of patients was only slightly related to the intensity of nurse utilization in the facilities in which they resided. Nearly 30 percent of never married patients were in nursing homes characterized by a low intensity of RN utilization, whereas only 20 percent of currently married patients resided in this kind of nursing home. This is consistent with the expectation that persons with a spouse to care for them at home might not enter a nursing home offering such a low intensity of nursing care as readily as persons living alone.

There was virtually no difference, however, between the patients with and without living children regarding the amount of nurse time available in their nursing home. It would appear, that while having a spouse might tend to keep people out of nursing homes offering a low level of nursing care available, having living children does not seem to function in the same way.

### (3) Length of Current Stay and Source of Payment

Long-time residents of nursing homes were somewhat more likely to be patients in nursing homes with a low intensity of RN utilization than short-time residents. Approximately 20 percent of residents in nursing homes less than two years were in nursing homes that had a low intensity of RN utilization, while almost 30 percent of patients with a current stay of four years or more were in this kind of facility. This suggests that the short-time patients may be in need of different kinds of care than those who are long-time residents.

There were substantial differences in the kind of nursing homes in which patients resided that were related to the source of payment for their first month's stay. While Medicare only paid for a small proportion of nursing home patients, the patients whose primary source of payment for their first month was Medicare were far less likely to be in a facility characterized by low RN intensity than other patients, and more likely to be in a nursing home where a half hour or more of RN time was available per patient per day. It is consistent with the intended coverage by Medicare that acutely ill patients use nursing homes where possible as a step down from full hospitalization and a step away from the return home while nursing care is still needed. An opposite pattern seemed to be true for patients whose primary source of payment for the first month's stay was paid for by a government program other than Medicare or Medicaid. More than 50 percent of these patients were residents of nursing homes with a low intensity of nurse utilization.

### (4) Physical and Mental Health Status

It was not unexpected to find that the physical health status of nursing home patients (as judged by the care-giver) was related to the intensity of RN utilization in their facility. Over 40 percent of the patients whose physical health status was judged to be excellent were residents of nursing homes with less than one-tenth of an hour of RN time available per patient per day, as compared to approximately 25 percent of the patients whose health status was good, fair or poor being in nursing homes having that little nurse time available. There were, however, only slightly more than 40 thousand, out of the 1.5 million nursing home patients, considered to be in excellent physical health.

A somewhat weaker association existed between mental health status and the intensity of the nursing home's use of nurses. As with physical health status, a slightly larger proportion of patients judged to be in excellent mental health were residing in nursing homes with less than one-tenth of an hour of RN time available than was true for patients judged to be in good, fair or poor mental health. The number of nursing home residents judged in excellent mental health was also small (53.5 thousand) relative to the total 1.5 million residents of nursing homes.

### (5) Behavioral Problems and Memory Difficulties

The number of behavioral problems attributed to residents of nursing homes was not associated with the intensity of RN utilization in the nursing home where they resided. The same was true for the level of memory difficulties experienced by current nursing home residents.

### c. Nurse Characteristics and the Intensity of RN Utilization

From the previous sections, it was reported that nearly 40 percent of the nursing homes had less than one-tenth of an hour of RN time available per patient per day. (Recall that less than 40 percent of these reported any RN hours during the past week). These nursing homes contained almost 25 percent of nursing home patients. However, of the estimated 99,707 registered nurses employed in nursing homes, fewer than five percent (4.9 percent) were employed by the nursing homes having less than one-tenth hour of RN time available per patient per day. More than 35 percent (36.0 percent) of nurses employed by nursing homes worked in the 17 percent of nursing home facilities with half of an hour or more of RN time available per patient per day. They were employed in the care of 17 percent of the residents of nursing homes.

### (1) Age and Highest Educational Preparation

There was a slight but consistent trend for a larger proportion of nurses in the older age groups to be employed in nursing homes with more RN time available per patient per day. This was most clearly demonstrated in nursing homes having half an hour or more of RN time available per patient per day. Only 31.2 percent of nurses under 35 years of age were employed in these nursing homes, as compared to 45.8 percent of nurses 65 years of age and older.

There was also a slight tendency for nurses in the higher levels of nursing related educational preparation to be employed in nursing homes with a higher intensity of RN utilization. The proportion of associate degree trained nurses employed in nursing homes with half an hour or more of RN time available per patient per day was only 28.0 percent, as compared to 37.0 percent with diploma level training, 41.3 percent with a bachelors degree in nursing and 41.7 percent with other bachelors degrees, masters or doctorate degrees.

(2) Position and Weekly Salary

As one might expect, there was a trend toward a larger proportion of nurses working in general nursing positions to be employed in nursing homes with a higher intensity of RN utilization. More than 40 percent of the registered nurses working in nursing homes in general nursing positions were employed in facilities having half an hour or more of nurse time available per patient per day. This was in contrast to nurses in nursing homes working in specialized nursing or supervisory positions. Just over 25 percent of nurses in specialized nursing or supervisory positions were employed in nursing homes where there was half an hour or more of RN time available per patient per day.

The weekly salary of nurses employed in nursing homes only varied slightly with the intensity of RN utilization at their place of employment. Whereas approximately 35 percent of nurses earning less than $500 per week were employed in nursing homes with a half hour or more of RN time available per patient per day, almost 45 percent of nurses earning $500 a week or more worked in nursing homes with this intensity of RN utilization.

d. Nursing Home Characteristics and the Level of RN Employment

Eleven thousand four hundred and nine of the estimated 19,070 nursing homes, or almost 60 percent, reported having a nursing staff whose composition was less than 10 percent registered nurses. However, only 5728, or about half, of those nursing homes with a low level of RN employment employed any registered nurses at all.

(1) Ownership and Affiliation

Nursing homes operated by nonprofit organizations tended to have a higher level of RN employment than proprietary and government nursing homes (see Table 17). Fewer than one-third of the nonprofits had less than 10 percent of their nursing staff composed of registered nurses, as compared to about 50 percent of the proprietary and government operated nursing homes.

Except for the 20 percent of independent nursing homes in which no nursing staff was reported, there were no meaningful differences in the level of RN employment among nursing homes that were part of a chain, independent or government operated.

Table 17. Number and percent of nursing homes by selected structural characteristics and level of RN employment.

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total...... | 19,070 | 100.0 | 9,282(**) | 48.7 | 5,608 | 29.4 | 2,05[illegible] | 10.8 | 2,127(*) | 11.2(*) |
| **Ownership** | | | | | | | | | | |
| Proprietary..... | 14,298 | 100.0 | 7,615 | 53.3 | 3,697 | 25.9 | 1,168 | 8.2 | 1,819(*) | 12.7(*) |
| Nonprofit....... | 3,758 | 100.0 | 1,166 | 31.0 | 1,489 | 39.6 | 794 | 21.1 | 309(*) | 8.2(*) |
| Government...... | 1,014 | 100.0 | 501 | 49.4 | 422 | 41.6 | 91(*) | 9.0(*) | 0(*) | 0.0(*) |
| **Affiliation** | | | | | | | | | | |
| Independent..... | 10,038 | 100.0 | 4,157 | 41.4 | 2,603 | 25.9 | 1,200 | 12.0 | 2,078(*) | 20.7(*) |
| Chain-small..... | 3,253 | 100.0 | 1,764 | 54.2 | 1,026 | 31.5 | 413 | 12.7 | 50(*) | 1.5(*) |
| Chain-medium.... | 2,218 | 100.0 | 1,410 | 63.6 | 603 | 27.2 | 205(*) | 9.2(*) | 0(*) | 0.0(*) |
| Chain-large..... | 2,054 | 100.0 | 1,107 | 53.9 | 811 | 39.5 | 136(*) | 6.6(*) | 0(*) | 0.0(*) |
| Government...... | 1,014 | 100.0 | 501 | 49.4 | 422 | 41.6 | 91 | 8.9 | 0(*) | 0.0(*) |
| Unknown......... | 492 | 100.0 | 343 | 69.7 | 144(*) | 29.3(*) | 5(*) | 1.0(*) | 0(*) | 0.0(*) |
| **Available beds** | | | | | | | | | | |
| 50 or less ..... | 6,983 | 100.0 | 3,460 | 49.5 | 947(*) | 13.6(*) | 547(*) | 7.8(*) | 2,030(*) | 29.1(*) |
| 51 to 99........ | 5,564 | 100.0 | 2,940 | 52.8 | 1,868 | 33.6 | 678 | 12.2 | 78(*) | 1.4(*) |
| 100 to 149...... | 3,900 | 100.0 | 1,921 | 49.3 | 1,578 | 40.4 | 402 | 10.3 | 0(*) | 0.0(*) |
| 150 to 199...... | 1,435 | 100.0 | 571 | 39.8 | 655 | 45.7 | 209 | 14.6 | 0(*) | 0.0(*) |
| 200 and over.... | 1,187 | 100.0 | 390 | 32.9 | 560 | 47.2 | 217 | 18.3 | 20(*) | 1.7(*) |
| **Number of services** | | | | | | | | | | |
| Less than 11.... | 4,978 | 100.0 | 2,164 | 43.5 | 845 | 17.0 | 296(*) | 5.9(*) | 1,673(*) | 33.6(*) |
| 11 to 12........ | 4,256 | 100.0 | 2,302 | 54.1 | 1,204 | 28.3 | 295(*) | 6.9(*) | 455(*) | 10.7(*) |
| 13 to 14........ | 7,039 | 100.0 | 3,521 | 50.0 | 2,527 | 35.9 | 992 | 14.1 | 0(*) | 0.0(*) |
| 15 or more...... | 2,797 | 100.0 | 1,294 | 46.3 | 1,033 | 36.9 | 470 | 16.8 | 0(*) | 0.0(*) |

(continued)

Table 17. (Continued).

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Certification** | | | | | | | | | | |
| Skilled nursing only...... | 2,530 | 100.0 | 987 | 39.0 | 1,019 | 40.3 | 522 | 20.6 | 1(*) | 0.0(*) |
| Skilled and intermediate.. | 5,721 | 100.0 | 1,989 | 34.8 | 2,868 | 50.1 | 864 | 15.1 | 0(*) | 0.0(*) |
| Intermediate care only..... | 5,206 | 100.0 | 3,690 | 70.9 | 1,163 | 2.3 | 338(*) | 6.5(*) | 16(*) | 0.3(*) |
| Neither......... | 4,652 | 100.0 | 2,330 | 50.1 | 435(*) | 9.4(*) | 316(*) | 6.8(*) | 1,571(*) | 33.8(*) |
| Unknown......... | 961(*) | 100.0(*) | 286(*) | 29.8(*) | 123(*) | 12.8(*) | 12(*) | 1.3(*) | 539(*) | 56.1(*) |
| **MD availability** | | | | | | | | | | |
| MD on premises at all times..... | 281 | 100.0 | 18(*) | 6.5(*) | 75(*) | 26.7(*) | 187(*) | 66.7(*) | 0(*) | 0.0(*) |
| MD on premises weekdays...... | 1,210 | 100.0 | 454 | 37.5 | 579 | 47.8 | 177(*) | 14.6(*) | 0(*) | 0.0(*) |
| MD on premises at scheduled times | 9,204 | 100.0 | 4,696 | 51.0 | 3,420 | 37.2 | 904 | 9.8 | 184(*) | 2.0(*) |
| MD on call only. | 5,735 | 100.0 | 3,316 | 57.8 | 1,153 | 20.1 | 460 | 8.0 | 807(*) | 14.1(*) |
| Other........... | 1,908 | 100.0 | 438(*) | 23.0(*) | 158(*) | 8.3(*) | 175(*) | 9.2(*) | 1,135(*) | 59.6(*) |
| Unknown......... | 733 | 100.0 | 359(*) | 49.1(*) | 224(*) | 30.6(*) | 149(*) | 20.4(*) | 0(*) | 0.0(*) |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: All nursing homes included in the National Nursing Home Survey.

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes 5,681 facilities that reported no registered nurse employees.

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### (2) Number of Beds, Services Available and Certification Status

Large nursing homes tended to have higher levels of RN employment than small ones. Nearly 30 percent of nursing homes with 50 or fewer beds reported having no nursing staff, and another 50 percent of the nursing homes of that size had a nursing staff consisting of less than 10 percent registered nurses. This was in contrast to nursing homes with 200 or more beds where barely one-third had a staff composed of less than 10 percent RNs.

A similar situation existed with respect to the number of services available. One-third of the nursing homes with less than 11 services had no nursing staff, and another 44 percent of nursing homes with this few services available was composed of a nursing staff with less than 10 percent RNs on it. This was in contrast to nursing homes having 13 or more services available, more than 50 percent of which had nursing staffs composed of 10 percent or more registered nurses.

There was a very clear division among nursing homes with respect to level of RN employment according to their certification status. Approximately one-third of the uncertified nursing homes reported no nursing staff, and another 50 percent of them had less than 10 percent of their nursing staff composed of RNs. More than 70 percent of nursing homes certified as ICFs only also had less than 10 percent of their nursing staff consisting of RNs. Nursing homes certified as SNFs, or combined SNFs and ICFs, had a higher level of nurse employment. Ten percent or more of the nursing staff was composed of RNs in more than 60 percent of these nursing homes.

### (3) Nurse Staffing Patterns

More than one-third of the 5681 nursing homes with less than one full-time equivalent registered nurse had no nursing staff at all, and the remaining two-thirds had less than 10 percent of their nursing staff composed of RNs. At the other end of the staffing continuum, nearly 40 percent of the nursing homes with 10 or more RN FTEs had a staff composed 20 percent or more of RNs. This illustrates the relationship that existed between the number of nurses on the staff and the proportional composition of the staff--the more nurses employed, the higher the level of RN employment expressed as a ratio of nurses to nursing staff.

With the exception of nursing homes having less than three-tenths of an LPN hour available per patient per day (of which nearly one-fourth had no nursing staff), there was no relationship between the intensity of LPN utilization and the level of RN employment. The same was true of the intensity of nursing aide utilization and the level of RN employment. The exception, again, was the 30 percent of nursing homes with less than 1.4 aide hours per patient per day that had no nursing staff at all.

#### (4) State RN Requirements

There was a clear relationship between the state RN requirement for the level of care offered in the nursing homes and the level of RN employment in the nursing homes. Nursing homes in states with no minimum RN requirements and those in states requiring only that the director of nursing be an RN, had lower levels of RN employment than nursing homes in states that required a full-time RN (in addition to the director of nursing) or an RN on all shifts. In the case of the former states, approximately 30 percent of nursing homes had a staff consisting of 10 percent or more RNs, whereas more than 70 percent of the nursing homes in states with higher RN requirements had a nursing staff consisting of 10 percent or more RNs.

### e. Characteristics of Nursing Home Residents and Level of RN Employment

While nearly 60 percent of the nursing homes had registered nurses constituting less than 10 percent of their nursing staff (and only half of them employed any RNs), these facilities contained just under 50 percent of the nursing home residents. On the other hand, there was approximately 11 percent of the nursing homes that reported RNs as constituting 20 percent or more of the nursing staff. Just over 13 percent of nursing home residents were patients in these facilities.

#### (1) Age and Race

There was no association between the age of current nursing home residents and the level of RN employment in the nursing home where they resided. That was not the case for the race of current residents. White nursing home residents were more likely to reside in nursing homes whose nursing staff was at least 10 percent RNs. More than half of the white nursing home residents were patients in such nursing homes whereas only 30 percent of nonwhites were residents in nursing homes with as high a RN staff ration.

### (2) Marital Status and Living Children

The marital status of current nursing home residents was not associated with the level of RN employment in nursing homes. Nor was there any association between current nursing home residents having a living child and the level of RN employment in their nursing home.

### (3) Length of Stay and Source of Payment

There was no relationship between the length of time a nursing home patient had resided in the nursing home and the level of RN employment in the nursing home. While patients for whom Medicare was the primary payer only constituted a small proportion of nursing home residents, they tended to be residents of nursing homes with higher levels of nurse employment.

### (4) Physical and Mental Health Status, Behavioral Problems and Memory Difficulties

The level of nurse employment did not vary across the categories of physical or mental health status. Neither were the number of behavioral problems or the extent of memory difficulties experienced by current nursing home residents associated with the proportion of nursing staff that were RNs.

### f. Nurse Characteristics and the Level of RN Employment

From the previous two sections, it was reported that almost 60 percent of the nursing homes had a nursing staff composed of less than 10 percent registered nurses, but that only half of them employed any nurses at all. Almost half of the nursing home patients were residents of such facilities. However, less than 20 percent of the registered nurses employed in nursing homes were employed by these facilities. From the perspective of nursing homes whose staff was at least 20 percent constituted by RNs, such facilities employed nearly 30 percent (29.1 percent) of the nurses, while representing only 11 percent of nursing homes and numbering as residents only 13 percent of nursing home patients.

### (1) Age and Highest Educational Preparation

The age of the nurses was not associated with the level of RN employment in the nursing home in which they were employed. There was only a slight tendency for nurses with associate degree training to be employed in nursing homes with a lower level of RN employment than nurses with a diploma, a baccalaureate or a higher degree.

### (2) Position and Weekly Salary

Nurses working in general nursing positions were more likely to be employed in nursing homes with a higher proportion of nursing staff that were RNs than nurses filling other positions. There was no association between the weekly salary of nurses and the level of nurse employment at the facility in which they were employed.

## 6. Multivariate Analyses

Linear regression models were used to further study the employment of RNs in nursing homes using the facility data from the 1985 National Nursing Home Survey. Two dependent variables were considered. First, the number of full-time equivalent (FTE) RNs on staff in the nursing home was studied. This variable measured the level of staffing in the nursing home. Second, the number of full-time equivalent RNs per 1000 inpatient days was used to measure the intensity of staffing. The regression models related the two dependent variables to the characteristics of the facilities shown in Table 18.

A series of linear regression models were fitted to the data to study the relationship of facility characteristics to RN employment in nursing homes. Since the size of the nursing home, of necessity, affected the level of RN utilization, an indicator of size--the number of facility inpatient days--was included in all but Model 3. For both dependent variables, the models studied were evaluated in the following sequence:

- inpatient days only (model 1)
- all variables (model 2)
- all variables excluding inpatient days (model 3)
- ownership and inpatient days (model 4)
- chain status and inpatient days (model 5)
- certification and inpatient days (model 6)
- other staff and inpatient days (model 7)
- reimbursement rates, private pay rates and inpatient days (model 8)
- state minimum RN requirements and inpatient days (model 9)
- admissions per bed, number of services, percent Medicaid days and inpatient days (model 10)
- all variables excluding reimbursement and private rates (model 11).

## Table 18. RN employment independent variables

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Categorical variables

- Ownership
  - Proprietary*
  - Nonprofit
  - Government
- Chain status
  - Independent*
  - Small chain
  - Medium chain
  - Large chain
- Certification
  - SNF only
  - SNF and ICF
  - ICF only
  - Neither*
- State minimum RN requirements
  - RN all shifts
  - Full-time RN and director of nursing
  - Full-time RN
  - Director of nursing to be an RN
  - No full-time RN required*

Continuous variables (except rate indicators)

- Reimbursement rates
  - Medicare
    - Indicator
    - Rate per day
  - Medicaid SNF
    - Indicator
    - Rate per day
  - Medicaid ICF
    - Indicator
    - Rate per day
- Private pay rates
  - Skilled care
    - Indicator
    - Rate per day
  - Intermediate care
    - Indicator
    - Rate per day
  - Residential care
    - Indicator
    - Rate per day
- Inpatient days
- Number of admissions per bed
- Full-time equivalent staffing
  - LPN/LVN
  - Nurses aides/orderlies
- Number of services
- Percent inpatient days covered by Medicaid
- Admissions per bed

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*Reference cell

A summary of these models for the number of FTE RNs is given in Table 19. The percent multiple correlation ($R^2$) given in the first row of the table and summarizes the overall fit of the model to the data. The p-value for the test of significance of the overall model is also given in the first row. All of the models were statistically significant with a moderate to high value of percent $R^2$ (44.5 to 71.0).

As expected, the number of inpatient days was a statistically significant predictor and it always indicated an increase in RNs with an increase in inpatient days except in Model 7. In Model 1, the number of inpatient days alone was estimated to increase the number of FTE RNs employed in a nursing home by one for every 5,555 additional inpatient days. The impact of inpatient days on the number of FTE RNs employed by a nursing home was greatly diminished in Model 2, the model that included the entire set of independent variables. In Model 2, one additional FTE RN was estimated to result from an increment of 31,250 inpatient days. The difference in the estimate seems to have resulted from the inclusion in the model of staff size measures. The number of FTE nurses appeared to be more sensitive to increases in the number of FTE nurses aides and orderlies (an alternative indicator of nursing home size), than it was to the number of inpatient days. In Model 7, inpatient days was not significantly related to number of FTE RNs. Model 7 included inpatient days, number of FTE LPNs and number of FTE nurses aides and orderlies as predictors, and only the latter was significantly associated with FTE RNs. This was confirmed by Model 3, the only one in which inpatient days was not included. All of the other independent variables that were included in Model 2 were also included in Model 3. The impact on the number of FTE RNs of an increase in nurses aides and orderlies was the same in Model 3 as it was in Model 7. Further, the loss in percent $R^2$ from Model 2 to Model 3 was trivial.

As seen in Model 4, nonprofit and government operated nursing homes tended to employ 2 to 3 more full-time equivalent RNs than did proprietary homes after accounting for the size of the home. While this effect was diminished when other variables were included in the models (Models 2 and 11), it was still present and significant.

Because government operated nursing homes were neither independent homes nor members of a chain, they also needed to be considered when studying the effect of chain status on RN staffing. In Models 2, 3, 5 and 11, government operated nursing homes tended to employ one to two more

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Table 19 Regression Models for full-time equivalent RN staffing

| | Model 1 | | Model 2 | | Model 3 | | Model 4 | | Model 5 | | Model 6 | | Model 7 | | Model 8 | | Model 9 | | Model 10 | | Model 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coeff. | P value | Coeff. | P value | Coeff. | P value | Coeff. | P value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value |
| Multiple correlation (%) | 44.5 | 0.0000 | 71.0 | 0.0000 | 70.6 | 0.0000 | 46.7 | 0.0000 | 46.2 | 0.0000 | 49.0 | 0.0000 | 61.6 | 0.0000 | 59.0 | 0.0000 | 49.4 | 0.0000 | 46.1 | 0.0000 | 65.0 | 0.0000 |
| Size | | | | | | | | | | | | | | | | | | | | | | |
| Inpatient days | 1.00e 04 | 0.0000 | 3.20e 05 | 0.0200 | | | 1.00e 04 | 0.0000 | 1.00e 04 | 0.0000 | 1.60e-04 | 0.0000 | 2.20e-05 | 0.1262 | 1.40e-04 | 0.0000 | 1.60e-04 | 0.0000 | 1.00e-04 | 0.0000 | 2.7e-05 | 0.0570 |
| Ownership | | | | | | | | | | | | | | | | | | | | | | |
| Proprietary* | | | | | | | | | | | | | | | | | | | | | | |
| Nonprofit | | | 0.553 | 0.0623 | 0.504 | 0.0855 | 2.143 | 0.0000 | | | | | | | | | | | | | 1.082 | 0.0003 |
| Governmental | | | 1.389 | 0.0155 | 1.330 | 0.0182 | 3.225 | 0.0005 | 2.261 | 0.0209 | | | | | | | | | | | 1.505 | 0.0150 |
| Chain | | | | | | | | | | | | | | | | | | | | | | |
| Independent* | | | | | | | | | | | | | | | | | | | | | | |
| Small | | | 0.125 | 0.7020 | -0.116 | 0.7211 | | | -0.640 | 0.1551 | | | | | | | | | | | -0.460 | 0.1739 |
| Medium | | | 0.480 | 0.1631 | 0.496 | 0.1595 | | | -1.055 | 0.0212 | | | | | | | | | | | -1.033 | 0.0027 |
| Large | | | -0.710 | 0.0307 | -0.715 | 0.0336 | | | -0.770 | 0.1009 | | | | | | | | | | | -1.270 | 0.0001 |
| Certification | | | | | | | | | | | | | | | | | | | | | | |
| SNF | | | 4.242 | 0.0004 | 4.233 | 0.0004 | | | | | 3.390 | 0.0000 | | | | | | | | | 1.294 | 0.0612 |
| SNF & ICF | | | -9.019 | 0.0000 | -9.769 | 0.0000 | | | | | 2.155 | 0.0031 | | | | | | | | | 0.490 | 0.4490 |
| ICF | | | -13.962 | 0.0000 | -13.051 | 0.0000 | | | | | -1.360 | 0.0006 | | | | | | | | | -0.335 | 0.5302 |
| Neither* | | | | | | | | | | | | | | | | | | | | | | |
| Other Staff | | | | | | | | | | | | | | | | | | | | | | |
| LPN/LVN | | | -0.109 | 0.1328 | -0.005 | 0.2373 | | | | | | | -0.162 | 0.1696 | | | | | | | -0.005 | 0.2546 |
| Aids/orderlies | | | 0.102 | 0.0000 | 0.204 | 0.0000 | | | | | | | 0.214 | 0.0000 | | | | | | | 0.198 | 0.0000 |
| Medicare/Medicaid rates | | | | | | | | | | | | | | | | | | | | | | |
| Medicare indicator | | | 1.036 | 0.2083 | 1.122 | 0.1832 | | | | | | | | | 0.092 | 0.8032 | | | | | | |
| Medicare rate | | | 0.003 | 0.0373 | -0.002 | 0.0527 | | | | | | | | | 1.70e-04 | 0.9000 | | | | | | |
| SNF indicator | | | -6.057 | 0.0000 | -6.730 | 0.0000 | | | | | | | | | -3.691 | 0.0039 | | | | | | |
| SNF rate | | | 0.075 | 0.0002 | 0.072 | 0.0002 | | | | | | | | | 0.080 | 0.0035 | | | | | | |
| ICF indicator | | | 12.194 | 0.0000 | 12.270 | 0.0000 | | | | | | | | | -3.430 | 0.0029 | | | | | | |
| ICF rate | | | 0.052 | 0.0053 | 0.052 | 0.0070 | | | | | | | | | 0.064 | 0.0126 | | | | | | |
| Private pay rates | | | | | | | | | | | | | | | | | | | | | | |
| Skilled indicator | | | 2.031 | 0.0028 | 2.900 | 0.0025 | | | | | | | | | -3.335 | 0.0049 | | | | | | |
| Skilled rate | | | 0.070 | 0.0000 | 0.072 | 0.0060 | | | | | | | | | 0.101 | 0.0000 | | | | | | |
| Intermediate ind. | | | 0.214 | 0.8092 | 0.117 | 0.8966 | | | | | | | | | -0.340 | 0.7414 | | | | | | |
| Intermediate rate | | | 0.011 | 0.5286 | 0.008 | 0.6418 | | | | | | | | | 0.029 | 0.1004 | | | | | | |
| Residential indicator | | | 0.557 | 0.2933 | 0.678 | 0.2044 | | | | | | | | | 0.592 | 0.3469 | | | | | | |
| Residential rate | | | 0.024 | 0.0780 | 0.026 | 0.0507 | | | | | | | | | -0.022 | 0.2130 | | | | | | |
| State requirements | | | | | | | | | | | | | | | | | | | | | | |
| RN all shifts | | | 1.491 | 0.0110 | 1.610 | 0.0068 | | | | | | | | | | | 4.572 | 0.0000 | | | 2.430 | 0.0001 |
| FT RN + DON | | | 0.670 | 0.1630 | 0.749 | 0.1210 | | | | | | | | | | | 3.172 | 0.0000 | | | 0.953 | 0.0527 |
| FT RN | | | 1.425 | 0.0013 | 1.490 | 0.0008 | | | | | | | | | | | 3.720 | 0.0000 | | | 2.104 | 0.0000 |
| DON a RN | | | 0.418 | 0.2716 | -0.413 | 0.2788 | | | | | | | | | | | 0.393 | 0.3376 | | | -0.420 | 0.2813 |
| No FT RN* | | | | | | | | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | | | | | | | | |
| Admissions per bed | | | 0.014 | 0.8925 | 0.007 | 0.9426 | | | | | | | | | | | | | 0.400 | 0.0004 | 0.216 | 0.0121 |
| No. of services | | | 0.051 | 0.1379 | 0.045 | 0.1828 | | | | | | | | | | | | | 0.102 | 0.0036 | 0.007 | 0.0598 |
| % Medicaid days | | | 0.023 | 0.0001 | 0.024 | 0.0000 | | | | | | | | | | | | | 0.012 | 0.0121 | -0.020 | 0.0012 |

* Reference cell

SOURCE. 1985 National Nursing Home Survey

POPULATION: All nursing homes included in the National Nursing Home Survey

FTE RNs than did independent homes. While the results were not always statistically significant, there was evidence that nursing homes belong to a chain employed fewer RNs than independent (nongovernment) homes, especially if they were part of a large chain.

The effect of certification on RN employment was difficult to establish unambiguously. Model 2 was somewhat misleading regarding the impact of certification because of the high correlation between certification and the reimbursement rate indicators. Model 6 indicated that homes with SNF certification employed more RNs than uncertified homes, but that homes with only ICF certification employed fewer RNs. Finally, Model 11 indicated no effect of certification except for SNFs after accounting for all the other variables and excluding the reimbursement and private pay rates.

Models 2, 3, 7 and 11 all consistently indicated that the number of FTE employed increased as the number of nurses aides and orderlies increased. While, the possible substitution of LPNs and LVNs for RNs was suggested by the negative coefficients for this variable in all three models, i.e. the number of FTE RN's employed went down as the number of FTE LPNs increased, they never reached statistical significance and does not provide clear evidence of substitution.

A consistent association existed between the number of FTE RNs and the three rates for SNF and ICF reimbursement and skilled nursing private pay in Models 2, 3 and 8. While the other rates appeared to have little effect on RN employment, as these rates increased so also did the FTE RNs employed by the facility.

The state minimum RN staffing requirements displayed a substantial effect on RN employment in Models 2, 3, 9 and 11. Simply requiring that the director of nursing be an RN had no greater effect on RN employment then having no full-time RN requirements at all. The other types of state minimum requirements increase the level of RN employment by as much as 2 to 3 FTE depending on the other variables in the model.

Models 2, 3, 10 and 11 indicated that the percent of inpatient days in a facility paid for by Medicaid had a consistent downward effect on the number of RNs employed. This suggests that nursing homes with large numbers of Medicaid beneficiaries, while maintaining the needed RN staffing level for continued eligibility, may well be cutting back on their RN staffing as a way of compensating for Medicaid payment rates that are below those of private pay patients. In nursing homes with few Medicaid patients and large numbers of private pay patients, on the other hand, the higher private pay rates (which are often justified on the basis of more RN availability) may serve to subsidize the rates paid by Medicaid. Higher Medicaid reimbursement may help assure that Medicaid patients in nursing homes receive the same level of nursing care as is provided to private pay patients.

Finally, the number of admissions per bed tended to increase the numbers of FTE RNs, while increasing the number of services demonstrated little or no effect on nurse employment.

In Table 20, the results for full-time equivalent RNs per 1000 inpatient days are reported. The only model that was not statistically significant was Model 1. It only included inpatient days as an independent variable. Also, the percent multiple correlation for all the models ranged from small to moderate (0.2 to 23.7). The effect of the size of the facility (inpatient days) was generally not important. Thus, inpatient days had little residual effect after allocating FTE RNs according to the number of inpatient days they reported having during the past year.

The only variables which exhibited a consistent effect were the state minimum RN requirements and admissions per bed. Any state minimum requirement for a full-time RN (not as director of nursing only) tended to increase the number of FTE RNs per 1000 inpatient days. Also, there was an association between admissions per bed and RN staffing per 1000 inpatient days, such that as the bed turnover rate increased so also did the RN staffing rate.

## B. Retention of RNs in Nursing Homes

### 1. Introduction

Retention of registered nurses is concerned with the length of time an RN stays with a specific nursing home. In this section, the factors that may affect retention are presented and discussed. In the discussion of the postulated model for retention, three measures for retention were indicated: (1) the 1-year change in the RN's employer, (2) number of years the RN worked in a facility, and (3) the importance of working conditions, schedule, salary, benefits, and professional opportunities to retaining a nurse in a facility. An analysis of the

Table 20 Regression models for full time equivalent staffing per 1000 inpatient days

| | Model 1 | | Model 2 | | Model 3 | | Model 4 | | Model 5 | | Model 6 | | Model 7 | | Model 8 | | Model 9 | | Model 10 | | Model 11 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Coeff | P value | Coeff. | P value | Coeff. | P value | Coeff. | P value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value |
| Multiple correlation (%) | 0.2 | 0.1010 | 23.7 | 0.0000 | 18.3 | 0.0000 | 2.7 | 0.0000 | 0.7 | 0.0161 | 4.8 | 0.0000 | 11.9 | 0.0003 | 17.2 | 0.0000 | 4.5 | 0.0000 | 4.8 | 0.0000 | 17.2 | 0.0000 |
| Size | | | | | | | | | | | | | | | | | | | | | | |
| Inpatient days....... | 5.8e-07 | 0.1010 | 5.9e-06 | 0.0688 | | | 2.7e-07 | 0.5240 | 4.8e-07 | 0.2217 | -8.8e-07 | 0.0199 | -6.3e-06 | 0.0491 | -2.0e-06 | 0.0090 | -5.1e-07 | 0.1746 | 3.6e-08 | 0.8976 | -6.e-06 | 0.0758 |
| Ownership | | | | | | | | | | | | | | | | | | | | | | |
| Proprietary*......... | | | | | | | | | | | | | | | | | | | | | | |
| Nonprofit............ | | | 0.046 | 0.2465 | 0.055 | 0.1750 | 0.129 | 0.0011 | | | | | | | | | | | | | 0.083 | 0.0163 |
| Governmental......... | | | 0.066 | 0.2754 | 0.075 | 0.2580 | 0.140 | 0.1166 | 0.112 | 0.2188 | | | | | | | | | | | 0.072 | 0.2781 |
| Chain | | | | | | | | | | | | | | | | | | | | | | |
| Independent.......... | | | | | | | | | | | | | | | | | | | | | | |
| Small................ | | | 0.10e-05 | 0.9973 | -0.001 | 0.9480 | | | 0.011 | 0.8005 | | | | | | | | | | | -0.011 | 0.5121 |
| Medium............... | | | -0.022 | 0.4387 | 0.021 | 0.4068 | | | -0.012 | 0.5848 | | | | | | | | | | | -0.038 | 0.0147 |
| Large................ | | | -3.2e-04 | 0.9932 | 5.1e-04 | 0.9895 | | | 0.013 | 0.4376 | | | | | | | | | | | -0.038 | 0.0481 |
| Certification | | | | | | | | | | | | | | | | | | | | | | |
| SNF.................. | | | 0.104 | 0.3080 | 0.106 | 0.3625 | | | | | 0.213 | 0.0001 | | | | | | | | | 0.103 | 0.0920 |
| SNF & ICF............ | | | 0.199 | 0.0594 | 0.209 | 0.1639 | | | | | 0.176 | 0.0000 | | | | | | | | | 0.091 | 0.0601 |
| ICF.................. | | | 0.219 | 0.0058 | 0.239 | 0.0407 | | | | | 0.038 | 0.2274 | | | | | | | | | 0.080 | 0.1868 |
| Neither.............. | | | | | | | | | | | | | | | | | | | | | | |
| Other staff | | | | | | | | | | | | | | | | | | | | | | |
| LPN/LVN.............. | | | 0.001 | 0.5315 | 0.006 | 0.0494 | | | | | | | 8.2e-04 | 0.7036 | | | | | | | -2.2e-04 | 0.9285 |
| Aids/orderlies....... | | | 0.006 | 0.0563 | 0.002 | 0.0073 | | | | | | | 0.008 | 0.0130 | | | | | | | 0.007 | 0.0520 |
| Medicare/Medicaid rates | | | | | | | | | | | | | | | | | | | | | | |
| Medicare indicator... | | | 0.132 | 0.1755 | 0.147 | 0.1735 | | | | | | | | | 0.003 | 0.3213 | | | | | | |
| Medicare rate........ | | | -0.003 | 0.1346 | -0.004 | 0.1500 | | | | | | | | | -0.002 | 0.2669 | | | | | | |
| SNF indicator........ | | | 0.342 | 0.0772 | -0.365 | 0.0857 | | | | | | | | | -0.351 | 0.0770 | | | | | | |
| SNF rate............. | | | 0.005 | 0.2122 | 0.006 | 0.2131 | | | | | | | | | 0.006 | 0.1569 | | | | | | |
| ICF indicator........ | | | 0.276 | 0.0117 | 0.260 | 0.0490 | | | | | | | | | -0.009 | 0.9067 | | | | | | |
| ICF rate............. | | | 6.60e-04 | 0.6425 | 7.8e-04 | 0.5674 | | | | | | | | | 1.5e-04 | 0.9300 | | | | | | |
| Private pay rates | | | | | | | | | | | | | | | | | | | | | | |
| Skilled indicator.... | | | -0.032 | 0.8104 | -0.020 | 0.8830 | | | | | | | | | -0.035 | 0.7805 | | | | | | |
| Skilled rate......... | | | 0.004 | 0.1318 | 0.004 | 0.1622 | | | | | | | | | 0.005 | 0.0801 | | | | | | |
| Intermediate ind..... | | | 0.076 | 0.4362 | 0.058 | 0.5296 | | | | | | | | | 0.053 | 0.5713 | | | | | | |
| Intermediate rate.... | | | -4.1e-04 | 0.8520 | 1.1e-04 | 0.9595 | | | | | | | | | 4.6e-04 | 0.0003 | | | | | | |
| Residential indicator | | | 0.017 | 0.6010 | -0.040 | 0.2210 | | | | | | | | | -0.069 | 0.0357 | | | | | | |
| Residential rate..... | | | 2.4e-04 | 0.7513 | 6.0e-04 | 0.4757 | | | | | | | | | 0.002 | 0.0010 | | | | | | |
| State requirements | | | | | | | | | | | | | | | | | | | | | | |
| RN all shifts........ | | | 0.0354 | 0.3579 | 0.013 | 0.7730 | | | | | | | | | | | 0.102 | 0.0000 | | | 0.077 | 0.0159 |
| FT RN + DON.......... | | | 0.007 | 0.7750 | 0.008 | 0.7605 | | | | | | | | | | | 0.140 | 0.0006 | | | 0.019 | 0.4209 |
| Full-time RN......... | | | 0.065 | 0.0463 | 0.053 | 0.0847 | | | | | | | | | | | 0.201 | 0.0000 | | | 0.090 | 0.0147 |
| DON a RN............. | | | -0.029 | 0.1936 | -0.030 | 0.1934 | | | | | | | | | | | 0.054 | 0.0031 | | | -0.016 | 0.4639 |
| No Full-time RN*..... | | | | | | | | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | | | | | | | | |
| Admissions per bed... | | | 0.035 | 0.0000 | 0.036 | 0.0001 | | | | | | | | | | | | | 0.056 | 0.0000 | 0.040 | 0.0000 |
| No. of services...... | | | 4.6e-04 | 0.8421 | -0.002 | 0.5199 | | | | | | | | | | | | | 0.010 | 0.0015 | 0.002 | 0.3316 |
| % Medicaid days...... | | | -0.001 | 0.2231 | 0.001 | 0.2761 | | | | | | | | | | | | | 5.6e-05 | 0.0630 | -0.001 | 0.2061 |

* Reference cell

SOURCE: 1985 National Nursing Home Survey

POPULATION: All nursing homes in the National Nursing Home Survey

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relationship among nurse, nursing home, and environmental factors and the measures mentioned above are presented in the following sections.

### 2. One-Year Retention of RNs

Ideally the one-year retention rate of RNs in a specified setting would be the percentage of the ratio of the number RNs having the same employer over a one-year time period and the number of RNs who were employed in that setting at the beginning of the time period. However, because of data limitations, it was necessary to define the one-year retention rate using the number of RNs who were employed in the setting at the end of the time period. The time period was from November 15, 1983 to November 15, 1984.

The information on setting was based on the RNs' employment setting in 1984. The settings used in the analyses include nursing homes (nursing homes in hospitals, other nursing homes, and other types of extended care facilities), hospitals (non-Federal, short- and long-term hospitals, Federal government hospitals, and other types of hospitals), and all other settings (nursing education, public health, student health, occupational health, ambulatory care, self-employed, etc.).

The discussion in this section focuses on how the 1-year retention of nurses (i.e., the percent of RNs who have been employed by the same employer for at least 1 year) varied by setting and the RNs' demographic and job characteristics. Tables on which the discussion in this section is based are included in Appendix E. Some representative standard errors for estimates included in the tables are included in Appendixes D and F.

#### a. Retention of RNs by Setting

Table 21 shows that for all settings 78.8 percent of the RNs employed in the U.S. were employed by the same employer in 1983 and 1984. Some 11.1 percent of the RNs changed employers (may also have changed employment setting), and 7.2 percent were either not employed or not licensed the prior year.

Nursing homes were able to retain 72.4 percent over the 1-year time period. This is approximately 9 percent less than the percentage of nurses hospitals were able to keep for the year. The 1-year retention of nurses in other settings was only slightly more than for nurses in nursing homes. Apparently then, the retention of nurses by nursing homes was less than for hospitals and was probably less than for other settings.

Table 21. Previous year employment status of RNs, in percent, by setting.

| Previous year employment status | Setting<br>All settings | <br>Nursing homes | <br>Hospitals | <br>Other settings |
|---|---|---|---|---|
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Same employer | 78.8 | 72.7 | 81.5 | 73.0 |
| Different employer | 11.1 | 13.4 | 8.9 | 16.7 |
| Not employed or licensed | 7.2 | 10.8 | 6.9 | 6.9 |
| Unknown | 2.9 | 3.0 | 2.7 | 3.4 |

SOURCE: 1984 National Sample Survey of Registered Nurses.
POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

How the retention of RNs in nursing homes varied by the nurses' demographic and job characteristics is discussed next. This will provide insight on which nurses were more likely to have stayed employed in a nursing home.

b. Retention of RNs by Nursing Homes by Age

In Table 22, the 1-year retention of RNs by employers is given by age. As expected, for all settings the younger nurses are more mobile, with only 73.4 percent of the nurses under 35 having stayed with a facility one year or more, and approximately 85 percent of the older nurses have been retained for as long a time period.

RNs employed in nursing homes show the same trend as for all settings, although the retention of young nurses is much lower. The percent of RNs under 35 years old and who have been employed by the same nursing home for 1 year or more was only 51.2 percent. The retention percentage increased to about 81 percent for nurses between 45 and 65 years old and even higher for those over 65.

Hospitals had higher retention percentages for all age groups than did nursing homes; however, the age group with the largest difference was the less than 35 year old group. For nurses under 35 years of age hospitals had 76.9 percent who have been employed for 1 year or more compared to 51.2 percent for nursing homes. Obviously, nursing homes had more of a problem retaining RNs than did hospitals, particularly younger nurses.

Table 22. Percentage of RNs retained by the same employer for at least 1 year by setting and nurse characteristics.

| Nurse characteristics | Setting | | | |
|---|---|---|---|---|
| | All settings | Nursing homes | Hospitals | Other settings |
| Total | 78.8 | 72.7 | 81.5 | 73.0 |
| **Age** | | | | |
| Under 35 | 73.4 | 51.2 | 76.9 | 60.5 |
| 35 to 44 | 80.9 | 74.6 | 84.9 | 73.3 |
| 45 to 54 | 84.9 | 81.2 | 88.4 | 80.2 |
| 55 to 64 | 86.6 | 80.7 | 89.6 | 85.0 |
| 65 and over | 84.2 | 88.1 | 90.4 | 76.7 |
| **Number of years since graduation** | | | | |
| Under 5 | 59.5 | 34.1 | 63.4 | 35.6 |
| 5 to 9 | 78.7 | 65.5 | 83.2 | 61.4 |
| 10 to 14 | 82.9 | 74.5 | 87.1 | 72.1 |
| 15 or more | 84.9 | 80.5 | 88.7 | 80.4 |
| **Highest educational preparation** | | | | |
| Diploma | 83.5 | 78.0 | 86.4 | 78.4 |
| Associate degree | 74.6 | 59.7 | 78.5 | 61.8 |
| Baccalaureate in nursing | 74.8 | 69.2 | 77.4 | 67.6 |
| Other | 79.7 | 75.1 | 81.7 | 78.0 |
| **Position** | | | | |
| Staff, general duty, or specialist nurse | 77.4 | 66.7 | 79.3 | 73.4 |
| Administrative, supervisory, or head nurse | 86.2 | 79.8 | 90.6 | 77.6 |

SOURCE: 1984 National Sample Survey of Registered Nurses.
POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

Settings other than nursing homes and hospitals kept 60.5 percent of the nurses under 35 years of age for 1 year or longer. This rate also was higher than for nursing homes; however, the retention percentage for the other age groups was not as different, except for those over 65 years of age. In comparison to settings other than hospitals, the nursing home retention rate was weak, especially for the younger RNs.

### c. Retention of RNs by Nursing Homes by the Number of Years Since Graduation

The relationship between the number of years since an RN graduated from their basic education program and the 1-year employer retention percentage is given in Table 22. Nurses who had recently graduated (fewer than 5 years on the job) showed an overall rate of retention of 59.5 percent. With an increased amount of time since graduation, the retention rate increased, reaching 84.9 percent when the years since graduation totaled 15 or more. This is consistent with the finding on retention as related to age. The younger or more recently graduated nurses were less likely to have been employed for 1 year or more than are older nurses or those who received their basic nursing education less recently.

As with age, the RN retention percentage for all of the "number of years since graduation" categories was less for nursing homes than it was for "all settings." The difference was more pronounced for the lower number of years since graduation and diminishes as the number of years increased. Thus, nursing homes had a difficult time retaining nurses, particularly the newer nurses.

Hospitals were able to retain almost twice as many of the nurses who graduated from their basic nursing education program fewer than 5 years prior to the survey (63.4 percent) than did nursing homes (34.1 percent). Hospitals' retention rate also was higher for the other categories of "years since graduation" but not by as high a margin. The retention rate profiles were similar for nursing homes and for settings other than nursing homes and hospitals.

Nursing homes had a smaller percentage of nurses who had graduated within 5 years of the survey than did hospitals, and the recently licensed nurses that they did have are less likely to have been there for a year. When nursing homes are compared to other settings, the proportion of recent graduates they employ and the retention rates were similar.

### d. Retention of RNs in Nursing Homes by Highest Educational Preparation

How the retention rate of RNs varied by a nurse's highest educational preparation is also shown in Table 22. For all settings, nurses who earned a diploma had the highest percent retaining their job for at least 1 year. The "other" category follows and includes nurses with a bachelor degree in a nursing-related field and nurses with advanced nursing or nursing-related degrees. Nurses with an associate or bachelor degree were similar in their retention rates.

In nursing homes, nurses with a diploma had the highest retention rate (78.0 percent), followed by "other" nurses (75.1 percent), baccalaureate (69.2 percent), and associate degree (59.7 percent). One explanation for the difference in retention for nurses with the different levels of preparation is that the diploma nurses were, on the average, older than nurses with other types of preparation. This explanation is consistent with the data on age and the number of years since graduation. Alternatively, the associate degree nurse was likely to be younger; thus, the retention rate would be expected to be lower. A supplemental explanation is that new hires were more likely to be associate degree nurses than diploma nurses; thus, they were more likely to have been employed by the facility within the last year.

For nurses employed in hospitals, the retention rate was higher for each type of preparation than for nursing homes. The retention rate for other settings was similar to that for nursing homes.

In nursing homes and other nonhospital settings, the retention rate for the associate degree nurse was lower than for the baccalaureate-prepared nurse; however, for hospitals, the retention rate was essentially the same for the two types of nurse. One explanation for this is that in nonhospital settings, the baccalaureate nurse rapidly moves into a supervisory role and likes the autonomy of the position, but in the hospital she or he remains a staff nurse the directions of physicians and supervisors.

### e. Retention of RNs in Nursing Homes by Nurse's Position

To investigate whether the functions a nurse performs are related to retention, nurses were categorized by their current position titles, to the degree possible, into those who oversee nurses and those who primarily provide patient care. The results are shown in Table 22. As one would expect, the overseers had a higher retention rate than did the care-givers--86.2 percent to 77.4 percent. This is consistent with other findings in as much as the administrative, supervisory and head nurses are expected to be older, not be recent graduates, and receive higher salaries. All three setting categories had the same profile.

f. Retention of RNs by Nursing Homes by Salary

As can be seen in Table 23, the retention of RNs increased with salary. This could be interpreted either as nurses who were employed the longest receive higher salaries or nurses who receive higher salaries stay longer. The percentages on the "total row" were different from the preceding tables because only full-time employee data were used in estimating the salaries rather than data on full- and part-time employees (as used in the other tables). For all salaries, the 73.2 percent retention rate for nursing homes was less than the 81.3 percent for hospitals and 75.9 percent for other settings. For full-time nurses with a salary of less than $300, 66.8 percent were employed in the same setting during the previous year. This retention rate increased with salary, with 88.1 percent of the RNs with salaries over $500 having stayed with the facility for at least 1 year.

The RN retention percentages for nursing homes was similar to that for all settings with some dropping off at the higher salaries. For the lowest salary range (i.e., less than $300 per week), both nursing homes and other settings had a higher retention rate than did hospitals. The reason that nursing homes had a better retention rate than hospitals did for the lowest salary category is not clear because hospitals had a higher retention rate for young nurses and nurses who had recently been licensed. One explanation is that nursing homes had more older nurses who were returning to the workforce after an extended absence, but at starting salaries; thus, older nurses, who are less likely to change jobs, are working for starting pay. It should be noted that hospitals had a very small percentage of nurses in the lower salary range (2.9 percent), and nursing homes had a much higher percent (15.9).

g. Discussion of the Findings

Nursing homes had about 9 percent fewer RNs who were employed by the same facility during prior years than did hospitals. The retention rate of RNs by other settings was essentially the same as for nursing homes. The retention rates were: 72.7 percent for nursing homes, 81.5 percent for hospitals, and 73.0 percent for other settings.

Table 23. Percentage of RNs retained by the same employer for at least one year by setting and average weekly salary.

| Average weekly salary | Setting | | | |
|---|---|---|---|---|
| | All settings | Nursing homes | Hospitals | Other settings |
| Total...................... | 79.5 | 73.2 | 81.3 | 75.9 |
| Under $300...................... | 66.8 | 63.3 | 60.2 | 72.1 |
| $300 to $399.................... | 70.8 | 71.2 | 71.0 | 70.2 |
| $400 to $499.................... | 82.2 | 77.6 | 83.6 | 77.4 |
| $500 and over................... | 88.1 | 84.9 | 89.3 | 84.1 |

SOURCE: 1984 National Sample Survey of Registered Nurses.
POPULATION: RNs employed as RNs in the U.S. in 1984 and were considered full-time employees.

Retention of RNs in nursing homes increased with age, years since graduation, and average weekly salary. Retention was highest for diploma nurses, followed by nurses with advanced degrees, a baccalaureate degree in nursing, and associate degrees. Nurses who oversee other nurses had a higher retention rate than did nurses providing patient care.

These findings would support the postulated model in that there was a relationship between demographic (age and education) and reward (salary) factors and retention; however the causal relationship is not clear. For example, did the higher salaries result in nurses staying with a facility longer or did the nurses who stayed longer with an employer receive a higher salary? Either or both could be true. If the demographic and reward factors caused the nurses to stay longer, then the model is supported by the data, but if it is the other way around, it is not.

In general, the retention rate for hospitals was higher than that for nursing homes for all level of the variables considered except one--nurses earning less than $300 per week. It is hypothesized that a greater proportion of older nurses are reentering the work-force through employment in nursing homes than through employment in hospitals. Because these older nurses were more stable and may have reentered the workforce at starting salaries, they may have been the cause of nursing homes' having a greater percent of nurses who earned less than $300 per week and were employed by the same facility during the previous year than did hospitals.

### 3. Number of Years RNs Had Worked in a Facility

The nurses included in the National Nursing Home Survey were asked to check one of five categories to indicate how many years they had worked in the facility in which they were currently employed. The responses to this question provide an indication of nurse retention. The primary emphasis in this section is on the percentage of nurses who have been retained by the same employer for 5 or more years. This level of tenure provides a benchmark by which retention can be compared across various nurse and facility factors.

Of the estimated 99,707 nurses employed by nursing homes, 40,642 (40.8 percent) were employed by the same facility for 5 or more years, and 20,727 (20.8 percent) were employed by a nursing home for less than a year. The remaining 36,939 nurses (37.1 percent) were employed by the same facility from 1 to fewer than 5 years (the retention is unknown for 1,399 nurses or 1.4 percent).

This section presents data on the number of years a nurse has worked in a facility by selected nurse and nursing home factors. (See Appendix G for tables related to this section.) The discussion indicates the relationship between the measure of tenure and other factors; however, little interpretation of the data is provided because multiple variables may be involved in assessing the relationship. The multivariate analyses, which are discussed later, will provide additional insight into the relationships.

#### a. Number of Years an RN Had Worked in a Facility by Age

Only 18.9 percent of the RNs less than 35 years old had been with a facility 5 or more years (see Table 24). Part of the explanation for this low retention rate is that more younger nurses than the older had recently been licensed; also the younger nurses are more mobile. The percentage of nurses who stayed with the same employer 5 or more years steadily increased with age, with 69.3 percent of nurses 65 and over having stayed that long.

#### b. Number of Years an RN Worked in a Facility by the Number of Years Worked for Pay as an RN Since Graduation

Table 24 also shows the number of years a nurse had worked for pay as an RN since graduating from her or his basic nursing education program by the number of years they had worked in the same facility. Note

Table 24. Percent of time an RN had worked in a facility by age and years worked since graduation.

| Nurse characteristic | Total |  | Percent of RNs working in facility |  |  |
|---|---|---|---|---|---|
|  | Number | Percent | Under 5 years | 5 or more years | Unknown |
| Total........... | 99,707 | 100.0 | 57.8 | 40.8 | 1.4 |
| **Age** |  |  |  |  |  |
| Under 35.............. | 21,769 | 100.0 | 79.7 | 18.9 | 1.4 |
| 35 to 44.............. | 25,253 | 100.0 | 60.6 | 37.7 | 1.7 |
| 45 to 54.............. | 27,116 | 100.0 | 51.2 | 47.4 | 1.4 |
| 55 to 64.............. | 21,193 | 100.0 | 45.8 | 53.4 | 0.8 |
| 65 and over........... | 3,536 | 100.0 | 27.8 | 69.3 | 2.9 |
| Unknown............... | 841 | 100.0 | 53.5(*) | 46.5(*) | 0.0(*) |
| **Years worked since graduation** |  |  |  |  |  |
| Under 5............... | 16,042 | 100.0 | 88.5 | 10.7 | 0.8(*) |
| 5 to 9................ | 14,054 | 100.0 | 74.5 | 23.9 | 1.6(*) |
| 10 to 14.............. | 17,718 | 100.0 | 58.2 | 39.1 | 2.7(*) |
| 15 and over........... | 51,006 | 100.0 | 43.6 | 55.3 | 1.1(*) |
| Unknown............... | 887 | 100.0 | 50.8(*) | 47.3(*) | 1.9(*) |

SOURCE: 1985 National Nursing Home Survey.
POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).
NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

that 10.7 percent of the nurses had worked 5 years or more in the same facility although they had worked fewer than 5 years as an RN. This is possible because some of the nurses started working in the facility before they were RNs. The question in the NNHS permitted reporting all the years they worked in a specific facility regardless of whether they were an RN for the entire period of time.

The table shows that, as the number of years a nurse had worked since graduation increased, so did the percentage of nurses working 5 or more years in the same facility. The percentage increased from 10.7 for nurses with fewer than 5 years of employment since graduation, to 23.9 percent for those with 5 to 9 years, and up to 55.3 percent for RNs with 15 or more years of experience since graduation. This variable, as well as all other variables that have an age dimension to them, have an increase in retention rate with an increase in age.

### c. Number of Years an RN Had Worked in a Facility by Her or His Highest Educational Level

In Table 25, the nurse's highest educational preparation is presented by associate degree, diploma, baccalaureate in nursing, and other. The "other" category includes RNs with a baccalaureate in a nursing-related field and RNs with a master's in a nursing or nursing-related field. There were no nurses in the sample with doctorates.

The data in the table show that a much higher percentage of diploma nurses were retained in a nursing home for 5 or more years than were nurses with any other type of preparation. This, at least in part, reflects that the diploma nurses were older. A higher proportion of the older nurses will have had their license 5 or more years than younger nurses. The older nurses also were less likely to change jobs.

### d. Number of Years an RN had Worked in a Facility by Number of Different Types of Continuing Education Courses Taken by the Nurse

In the NNHS, a nurse could check which of 15 types of continuing education (CE) courses (related to care for the aged or chronically ill or nursing home patients) she or he took during the previous year. The results are shown in Table 25. A total of 52.3 percent of the nurses having taken six or more different types of CE courses within a year stayed employed in a facility 5 or more years. Those nurses who took fewer types of CE courses had a lower percentage staying that long, and those nurses who took no CE courses had the lowest percentage (34.5 percent). Of course, the "none" category included recently licensed nurses who had not yet had an opportunity to take any continuing education courses.

### e. Number of Years an RN Had Worked in a Facility by Geriatric Education

The nurses surveyed were asked whether they had graduated from a geriatric nurse practitioner program or from a master's program specializing in geriatric nursing. The "no" category in the geriatric nursing section of Table 25 indicates they did neither, and a "yes" indicates they did one or the other (or both). Note that only 4.1 percent of the nurses working in nursing homes were geriatric nurse practitioners or had geriatric nursing education at the master's level. For nurses with 5 or more years in the facility, the difference in the percent of nurses in the "yes" and "no" categories is not statistically significant.

Table 25. Percent of time an RN had worked in the facility by educational considerations.

| Educational characteristics | Total | | Percent of RNs working in facility | | |
|---|---|---|---|---|---|
| | Number | Percent | Under 5 years | 5 or more years | Unknown |
| Total............ | 99,707 | 100.0 | 57.8 | 40.8 | 1.4 |
| Highest educational preparation | | | | | |
| Associate degree...... | 21,843 | 100.0 | 74.5 | 25.0 | 0.5(*) |
| Diploma.............. | 56,814 | 100.0 | 47.3 | 51.5 | 1.2 |
| Baccalaureate in nursing............. | 13,281 | 100.0 | 70.3 | 27.5 | 2.2(*) |
| Other(#)............. | 7,227 | 100.0 | 66.4 | 29.3 | 4.3(*) |
| Unknown.............. | 541(*) | 100.0(*) | 65.3(*) | 34.7(*) | 0.0(*) |
| Number of types of CE courses taken | | | | | |
| None.................. | 20,068 | 100.0 | 64.1 | 34.5 | 1.4(*) |
| 1..................... | 16,873 | 100.0 | 59.1 | 40.5 | 0.4(*) |
| 2 or 3................ | 27,996 | 100.0 | 62.0 | 36.0 | 2.0(*) |
| 4 or 5................ | 17,586 | 100.0 | 54.4 | 44.4 | 1.2(*) |
| 6 or more............. | 17,185 | 100.0 | 46.0 | 52.3 | 1.7(*) |
| Education in geriatric taken | | | | | |
| No.................... | 95,133 | 100.0 | 58.1 | 40.5 | 1.4 |
| Yes................... | 4,047 | 100.0 | 55.6 | 43.6 | 0.8 |
| Unknown............... | 527 | 100.0 | 33.8 | 66.2 | 0.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.
#Includes advanced degrees in nursing and nursing related fields and bachelors in nursing related field.

### f. Number of Years an RN Had Worked in a Facility by the Weekly Salary of Full-Time Nurses

The range of weekly salaries for nurses employed full-time is presented in Table 26 as a function of the number of years an RN had worked in a facility. One would expect that, in general, nurses who had been with the nursing home the longest should have had the highest salary. In fact, the proportion of nurses with 5 or more years of employment in the same facility increased as their salary increased. Of the nurses earning less

Table 26. Percent of time an RN had worked in the facility by the nurse's salary, other employment, and schedule.

| Nurse characteristics | Total |  | Percent of RNs working in facility |  |  |
|---|---|---|---|---|---|
|  | Number | Percent | Under 5 years | 5 or more years | Unknown |
| Salary of full-time nurses[1] |  |  |  |  |  |
| Total............ | 60,624 | 100.0 | 57.7 | 41.9 | 0.4(*) |
| Under $300............ | 5,739 | 100.0 | 73.7 | 26.3 | 0.0(*) |
| $300 to $399.......... | 21,726 | 100.0 | 64.7 | 34.8 | 0.5(*) |
| $400 to $499.......... | 16,272 | 100.0 | 51.7 | 48.3 | 0.0(*) |
| $500 and over......... | 10,287 | 100.0 | 50.0 | 49.6 | 0.4(*) |
| Unknown............... | 6,600 | 100.0 | 47.4 | 51.4 | 1.2(*) |
| Other employment[2] |  |  |  |  |  |
| Total............ | 99,707 | 100.0 | 57.8 | 40.8 | 1.4 |
| Yes................... | 11,900 | 100.0 | 75.5 | 24.1 | 0.4(*) |
| No.................... | 86,508 | 100.0 | 56.1 | 43.6 | 0.3(*) |
| Unknown............... | 1,299 | 100.0 | 13.0(*) | 6.5(*) | 80.5 |
| Schedule[2] |  |  |  |  |  |
| Total............ | 99,707 | 100.0 | 57.8 | 40.8 | 1.4 |
| Shift rotates......... | 8,926 | 100.0 | 69.3 | 30.5 | 0.2 |
| Day shift............. | 53,447 | 100.0 | 56.0 | 43.6 | 0.4 |
| Evening shift......... | 16,889 | 100.0 | 63.0 | 36.6 | 0.4 |
| Night shift........... | 15,280 | 100.0 | 57.1 | 42.8 | 0.1 |
| Unknown............... | 5,165 | 100.0 | 42.0 | 36.8 | 21.2 |

SOURCE: 1985 National Nursing Home Survey.

POPULATIONS: 1/ RNs in the contiguous 48 states and DC who were on the facility's payroll and were considered full-time employees.
2/ RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

than $300 per week, only 26.3 percent had been with a nursing home for 5 or more years, and 49.6 percent of the nurses with a weekly salary of $500 or more had been retained for at least 5 years.

### g. Number of Years an RN Had Worked in a Facility by Whether a Nurse Had Other Employment

An estimated 11,900 (11.9 percent) of the nurses who worked in nursing homes had multiple jobs. Nurses with other employment as an RN had a lower 5-year retention rate than nurses without another job. As indicated in Table 26, only 24.1 percent of the nurses with other employment had been with the same facility for 5 or more years. Of those with only one job, however, 43.6 percent had been with their employer for 5 or more years.

The other employment reported by nurses may have been their primary or secondary job. Of those nurses who reported the number of hours per week they worked at their other job, 28.7 percent worked 35 hours or more per week. For these nurses it would appear that the nursing home was either their secondary job or that they were working two full-time jobs. In either case, it would seem that the probability of these nurses with full-time employment elsewhere would leave the nursing home was higher than for those with part-time employment elsewhere or no other employment.

### h. Number of Years an RN Had Worked in a Facility by the Nurse's Shift

The surveyed nurses were requested to indicate if they rotated shifts, and, if they did not, to check the principal shift they worked. Over one-half (53.6 percent) of the nurses worked the day shift. An approximately equal number worked the evening and night shift (16.9 and 15.3 percent, respectively), with only 8.9 percent rotating shifts (the shift status was not known for 5.2 percent).

Of the nurses who rotated shifts, a smaller proportion had 5 or more years with the facility than nurses on other shifts (see Table 26). A total of 30.5 percent of nurses who rotate shifts had been with a nursing home for 5 or more years, compared to 43.6 percent for those who worked the day shift. Nurses working the day shift had the highest percentage with the longer tenure.

### i. Number of Years an RN Had Worked in a Facility by the Facility's Ownership

The facilities were categorized as to whether they were proprietary, nonprofit, or government run. An estimated 57,033 nurses worked in proprietary nursing homes, 30,924 in nonprofit facilities, and

11,751 in government-run homes. Government-run nursing homes had a higher percentage of nurses with 5 or more years tenure with the same facility as did nursing homes with other types of ownership (see Table 27). Proprietary nursing homes had the lowest percentage of nurses having been employed in the same facility 5 or more years.

### j. Number of Years an RN Had Worked in a Facility by Whether the Facility has Part of a Chain of Nursing Homes

Nursing homes surveyed were asked to indicate whether their facility was a member of a group of facilities operating under one general authority or general ownership and, if they were, the number of associated facilities. Government-run nursing homes were not requested to provide this information. Of the 87,956 nurses employed in nongovernment-run nursing homes, nearly one-half (49.5 percent) were employed by independent facilities. An estimated 21.3 percent were employed in facilities that belonged to a small chain (fewer than 10 facilities), and 12.7 percent were in a medium-sized chain (10 to 99 facilities). Nursing home chains having 100 or more facilities employed 14.7 percent of the nurses (for 1.9 percent of the nurses, the chain status of the facility in which they were employed was unknown).

The medium-sized nursing home category had the lowest percentage of nurses who had been with the facility for 5 or more years (see Table 27). The nursing homes not belonging to a chain had the highest percentage of nurses with 5 or more years.

### k. Number of Years an RN Had Worked in a Facility by the Number of Resident Beds that Were Available

The facilities were categorized according to the number of beds available for residents. As shown in Table 27, 8.6 percent of the nurses were employed in nursing homes with 50 or fewer beds. About one-fourth of the nurses were employed in facilities with 51 to 99 beds available (25.2 percent) and 100 to 149 beds (25.0 percent). An estimated 16.3 percent of the nurses were employed in nursing homes with 150 to 199 beds, and the remaining nurses (24.8 percent) worked in facilities with 200 or more beds.

Table 27. Percent of time an RN had worked in a facility by characteristics of the facility in which the nurse was employed.

| Characteristics of facility in which nurse was employed | Total | | Percent of RNs working in facility | | |
|---|---|---|---|---|---|
| | Number | Percent | Under 5 years | 5 or more years | Unknown |
| Ownership1/ | | | | | |
| Total............. | 99,707 | 100.0 | 57.8 | 40.8 | 1.4 |
| Proprietary........... | 57,033 | 100.0 | 61.2 | 37.5 | 1.3 |
| Nonprofit............. | 30,924 | 100.0 | 54.3 | 43.6 | 2.1(*) |
| Government............ | 11,751 | 100.0 | 50.7 | 49.2 | 0.1(*) |
| Chain status for nongovernment nursing homes2/ | | | | | |
| Total............. | 87,956 | 100.0 | 57.8 | 40.8 | 1.4 |
| Independent........... | 43,520 | 100.0 | 54.4 | 43.8 | 1.8(*) |
| 2 to 9 facilities...... | 18,707 | 100.0 | 59.5 | 39.5 | 1.0(*) |
| 10 to 99 facilities.... | 11,164 | 100.0 | 68.1 | 30.8 | 1.1(*) |
| 100 or more facilities. | 12,890 | 100.0 | 64.1 | 33.6 | 2.3(*) |
| Unknown................ | 1,675 | 100.0 | 60.4 | 38.9(*) | 0.7(*) |
| Size of facility1/ | | | | | |
| Total............. | 99,707 | 100.0 | 57.8 | 40.8 | 1.4 |
| 50 or less............ | 8,587 | 100.0 | 53.3 | 46.5 | 0.2(*) |
| 51 to 99.............. | 25,133 | 100.0 | 57.9 | 39.8 | 2.3(*) |
| 100 to 149............ | 24,972 | 100.0 | 59.0 | 39.8 | 1.2(*) |
| 150 to 199............ | 16,248 | 100.0 | 64.1 | 34.3 | 1.6(*) |
| 200 and over.......... | 24,767 | 100.0 | 54.1 | 44.9 | 1.0(*) |
| Hospital Beds in County | | | | | |
| Total............. | 99,707 | 100.0 | 57.8 | 40.8 | 1.4 |
| 0..................... | 15,641 | 100.0 | 57.2 | 40.5 | 2.3(*) |
| 1 to 99............... | 36,397 | 100.0 | 57.9 | 41.0 | 1.1(*) |
| 100 to 199............ | 17,383 | 100.0 | 59.9 | 37.4 | 2.7(*) |
| 200 to 299............ | 7,449 | 100.0 | 59.3 | 40.5 | 0.2(*) |
| 300 or more........... | 22,837 | 100.0 | 56.2 | 43.1 | 0.7(*) |

SOURCE: 1985 National Nursing Home Survey.

POPULATIONS: 1/ Nurses employed in proprietary and nonprofit nursing homes.
2/ RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Whether the retention rate changes with the size of the facility is uncertain. The size of the standard error in relation to the values of the variables does not permit making a definitive statement on the difference in retention rate by size. The lack of a consistent trend for those nurses with 5 or more years of experience indicates that recategorizing the data could smooth out the differences.

### l. Retention of RNs by Nursing homes by Number of Hospital Beds in County

To investigate what effect alternative employment opportunities may have on retention, the relationship between the 5-year retention rate and the number of hospital beds in the county was examined. Since approximately two-thirds of all nurses are employed in hospitals it was believed that the number of hospital beds would be a good surrogate measure of the demand for nurses. The data, however, showed no significant difference in the 5-year retention rate as a function of the number of beds in the county (see Table 27). So, once the nursing home hires a nurse, the presence or absence of demand does not appear to affect the retention rate. Of course there may be more competition in hiring the nurse or possibly the supply of nurses tend to follow the demand.

### m. Summary of the 5 Year Retention Rate

An estimated 40.8 percent of the nurses working in nursing homes had worked in the same facility 5 or more years. The proportion of RNs staying with the same facility for 5 or more years increased with age, number of years since the nurse graduated from her or his basic nursing education program, average weekly salary, and number of different types of continuing education courses taken by the nurse. Nurses whose highest education was a diploma had a higher retention rate than nurses with other types of preparation. Nurses who were employed in government owned facilities had a higher retention rate than those that were not. Nurses employed in independent facilities had a higher retention rate than those that were part of a chain. Differences in the retention rates were not detected for nurses employed in different size facilities nor for nurses with geriatric preparation.

These data are consistant with the 1-year retention data. These data also support the postulated retention model as discussed in the previous section on the 1-year retention rate. In addition, the 5-year retention data support the postulated relationship between structural relationship and retention, in as much as there was a difference in the retention rate based on ownership and chain status.

### 4. Importance of Various Factors to Retention

#### a. General Assessment

The RNs in the national sample survey of nursing homes were asked to indicate the importance of 45 factors to the retention of RNs in nursing homes. The results of this assessment are shown in Table 28. The 10 factors that had the highest percentage of the nurses marking the "all important" category are:

- Insurance plan at no cost or partially paid for covering hospitalization (52.7 percent)
- Well-equipped facility with functional nursing units (52.3 percent)
- Insurance plan at no cost or partially paid for covering medical/surgical care (51.1 percent)
- Provision of comprehensive orientation program for those newly-hired (45.2 percent)
- Graduated salary plan with increases according to length of service (43.7 percent)
- Graduated vacation plan varying according to length of service (43.0 percent)
- Graduated salary plan with increases according to merit (42.7 percent)
- Pay differential for holiday work (41.2 percent)
- Retirement plan partially or totally paid for by the employer (40.4 percent)
- Insurance plans at no cost or partially paid for covering dental care (38.6 percent)

With two exceptions, these 10 highest-rated factors would be the same (although the order would change) even if the top two importance categories were combined. The last two factors would be replaced with "Provision of in-service education" and "Pay differential for weekend work." The percentage of nurses who indicated either "all" or "very" important for the top 10 factors ranged from a low of 74.1 to a high of 88.7 percent; thus, there is considerable agreement among the nurses on what is important to retention.

Table 28. Importance of employment situation factors to the retention of RNs in nursing homes.

| | Importance of selected factors to retention | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Not important | | Slightly important | | Some importance | | Very important | | All important | | Unknown | |
| Retention factors | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. |
| 1. Clinical supervision available: | | | | | | | | | | | | |
| a. By a master's prepared clinical specialist | 33.4 | 1.2 | 19.2 | 0.9 | 27.6 | 1.0 | 10.8 | 0.8 | 2.7 | 0.4 | 6.2 | 0.6 |
| b. By experienced nursing home nurses | 3.6 | 0.5 | 8.5 | 0.8 | 20.3 | 1.0 | 43.0 | 1.2 | 20.3 | 1.0 | 4.2 | 0.5 |
| 2. Career counseling | 24.1 | 1.0 | 23.2 | 1.0 | 27.6 | 1.2 | 16.6 | 0.9 | 3.6 | 0.5 | 4.9 | 0.5 |
| 3. Job advancement possibility along clinical lines | 4.9 | 0.6 | 7.1 | 0.6 | 20.3 | 0.9 | 42.9 | 1.2 | 21.0 | 1.0 | 3.8 | 0.5 |
| 4. Job advancement possibility along administrative lines | 10.8 | 0.8 | 12.7 | 0.8 | 29.0 | 1.1 | 29.6 | 1.1 | 14.3 | 0.8 | 3.7 | 0.5 |
| 5. Ability to arrange work hours to work: | | | | | | | | | | | | |
| a. During child's school hours | 8.3 | 0.7 | 5.8 | 0.6 | 14.6 | 0.8 | 41.8 | 1.1 | 25.4 | 1.0 | 4.1 | 0.5 |
| b. During child's school term | 12.0 | 0.8 | 9.9 | 0.7 | 19.2 | 1.0 | 35.1 | 1.1 | 19.4 | 0.9 | 4.3 | 0.5 |
| c. During weekdays only | 9.4 | 0.7 | 11.0 | 0.8 | 26.6 | 1.2 | 31.1 | 1.1 | 17.3 | 0.9 | 4.5 | 0.5 |
| d. During weekends only | 18.6 | 1.0 | 13.4 | 0.8 | 26.4 | 1.1 | 23.8 | 1.0 | 10.7 | 0.7 | 5.1 | 0.6 |
| e. Rotating shifts | 26.7 | 1.2 | 10.5 | 0.8 | 18.8 | 1.1 | 22.1 | 1.0 | 16.4 | 1.0 | 5.4 | 0.5 |
| f. Day shift only | 5.2 | 0.5 | 4.8 | 0.5 | 16.3 | 0.8 | 38.6 | 1.2 | 30.7 | 1.2 | 4.5 | 0.5 |
| g. Evening shift only | 13.9 | 0.8 | 7.7 | 0.6 | 23.7 | 1.0 | 30.3 | 1.1 | 19.2 | 1.0 | 5.2 | 0.5 |
| h. Night shift only | 16.7 | 0.9 | 8.0 | 0.6 | 21.5 | 1.0 | 29.4 | 1.1 | 19.0 | 1.0 | 5.4 | 0.5 |
| 6. Not required to "float" to unfamiliar units | 9.1 | 0.7 | 7.8 | 0.7 | 17.9 | 0.9 | 32.0 | 1.1 | 28.5 | 1.4 | 4.7 | 0.5 |
| 7. Pay differential for: | | | | | | | | | | | | |
| a. Evening shift | 6.9 | 0.6 | 4.7 | 0.4 | 15.7 | 1.0 | 37.2 | 1.2 | 31.5 | 1.4 | 3.9 | 0.5 |
| b. Night shift | 6.3 | 0.6 | 4.0 | 0.4 | 14.4 | 0.9 | 36.0 | 1.2 | 35.1 | 1.4 | 4.2 | 0.5 |
| c. Weekend work | 7.5 | 0.6 | 4.8 | 0.4 | 17.2 | 0.9 | 35.0 | 1.1 | 31.4 | 1.2 | 4.1 | 0.5 |
| d. Holiday work | 3.7 | 0.4 | 3.1 | 0.4 | 12.0 | 0.8 | 36.6 | 1.1 | 41.2 | 1.2 | 3.4 | 0.4 |

(continued)

Table 28. (Continued)

| Retention factors | Not important Percent | Not important S.E. | Slightly important Percent | Slightly important S.E. | Some importance Percent | Some importance S.E. | Very important Percent | Very important S.E. | All important Percent | All important S.E. | Unknown Percent | Unknown S.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Importance of selected factors to retention | | | | | | | | | | | |
| 8. Pay differential or separate salary scale by educational preparation | 8.7 | 0.8 | 9.8 | 0.7 | 25.0 | 1.1 | 31.7 | 1.2 | 21.0 | 1.0 | 3.8 | 0.4 |
| 9. Graduated salary plan with increases according to: | | | | | | | | | | | | |
| a. Length-of-service | 1.6 | 0.3 | 2.4 | 0.4 | 9.3 | 0.7 | 39.7 | 1.3 | 43.7 | 1.3 | 3.3 | 0.4 |
| b. Merit | 2.6 | 0.4 | 2.7 | 0.4 | 10.6 | 0.8 | 37.1 | 1.2 | 42.7 | 1.3 | 4.3 | 0.5 |
| 10. Graduated vacation plan varying according to length-of-service | 0.8 | 0.2 | 2.2 | 0.4 | 8.8 | 0.7 | 41.7 | 1.2 | 43.0 | 1.3 | 3.6 | 0.4 |
| 11. Leave of absence for maternity | 9.9 | 0.7 | 5.8 | 0.6 | 18.1 | 0.9 | 34.7 | 1.2 | 27.1 | 1.1 | 4.4 | 0.5 |
| 12. Child care facilities | 21.6 | 1.0 | 12.9 | 0.9 | 26.2 | 1.0 | 21.1 | 1.1 | 13.1 | 0.8 | 5.1 | 0.5 |
| 13. Free parking | 14.4 | 0.8 | 8.2 | 0.6 | 17.6 | 0.9 | 29.0 | 1.0 | 26.8 | 1.1 | 4.0 | 0.5 |
| 14. Convenient public transportation | 24.2 | 1.1 | 10.9 | 0.7 | 23.4 | 1.1 | 21.6 | 1.0 | 15.4 | 1.0 | 4.5 | 0.5 |
| 15. Meals at no cost or subsidized | 20.6 | 1.0 | 14.1 | 0.8 | 28.5 | 1.2 | 19.0 | 0.9 | 13.6 | 1.0 | 4.3 | 0.5 |
| 16. Subsidized housing | 52.9 | 1.3 | 14.2 | 0.9 | 17.7 | 0.9 | 5.5 | 0.6 | 4.1 | 0.5 | 5.5 | 0.5 |
| 17. Laundry of uniforms | 54.0 | 1.4 | 13.7 | 0.8 | 16.6 | 0.9 | 5.3 | 0.5 | 4.6 | 0.6 | 5.8 | 0.6 |
| 18. Insurance plans at no cost or partially paid for covering: | | | | | | | | | | | | |
| a. Hospitalization | 2.8 | 0.4 | 1.1 | 0.2 | 5.7 | 0.5 | 34.6 | 1.2 | 52.7 | 1.4 | 3.1 | 0.4 |
| b. Medical/surgical care | 3.2 | 0.4 | 1.2 | 0.2 | 6.7 | 0.6 | 34.5 | 1.2 | 51.1 | 1.4 | 3.3 | 0.4 |
| c. Dental | 4.7 | 0.5 | 3.9 | 0.4 | 15.4 | 0.9 | 33.5 | 1.1 | 38.6 | 1.4 | 3.8 | 0.4 |
| d. Life | 8.7 | 0.8 | 7.9 | 0.7 | 18.6 | 1.0 | 29.9 | 1.1 | 31.3 | 1.2 | 3.7 | 0.4 |
| 19. Retirement plan (other than Federal social security) partially or totally paid for by employer | 3.2 | 0.4 | 3.8 | 0.5 | 15.5 | 0.9 | 33.3 | 1.0 | 40.4 | 1.1 | 3.8 | 0.4 |
| 20. Availability of physicians | 5.0 | 0.7 | 5.1 | 0.5 | 16.6 | 0.9 | 37.6 | 1.2 | 31.7 | 1.1 | 4.0 | 0.5 |
| 21. Availability of support service personnel and nonprofessionals to do nonnursing tasks | 2.3 | 0.5 | 3.6 | 0.4 | 16.3 | 0.9 | 39.4 | 1.2 | 34.7 | 1.1 | 3.7 | 0.5 |

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Table 28. (Continued)

| Retention factors | Importance of selected factors to retention |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Not important |  | Slightly important |  | Some importance |  | Very important |  | All important |  | Unknown |  |
|  | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. |
| 22. Well-ecuppped facility with functional nursing units...... | 0.7(*) | 0.2 | 1.0 | 0.3 | 6.0 | 0.6 | 36.4 | 1.1 | 52.3 | 1.2 | 3.6 | 0.5 |
| 23. Security personnel available.. | 9.0 | 0.7 | 11.1 | 0.8 | 27.9 | 1.1 | 27.8 | 1.2 | 20.0 | 1.0 | 4.0 | 0.5 |
| 24. Use of facility as clinical center for nursing students... | 27.1 | 1.1 | 13.9 | 0.8 | 33.9 | 1.1 | 14.0 | 0.9 | 6.7 | 0.6 | 4.3 | 0.5 |
| 25. Opportunity for professional development such as participation in clinical nursing conferences and nursing research projects... | 8.1 | 0.7 | 9.5 | 0.7 | 31.1 | 1.2 | 30.5 | 1.2 | 16.7 | 0.9 | 4.0 | 0.5 |
| 26. Availability of college tuition reimbursement plan. .......... | 10.6 | 0.7 | 11.1 | 0.8 | 24.4 | 1.1 | 29.8 | 1.1 | 19.7 | 1.0 | 4.3 | 0.5 |
| 27. Release time with pay for continuing education........... | 6.8 | 0.6 | 8.2 | 0.7 | 21.4 | 1.1 | 35.4 | 1.2 | 24.2 | 1.1 | 4.0 | 0.5 |
| 28. Reimbursement for expenses for continuing education............ | 5.1 | 0.5 | 5.9 | 0.6 | 19.6 | 1.0 | 39.1 | 1.2 | 26.5 | 1.1 | 3.9 | 0.5 |
| 29. Provision of in-service education...................... | 1.7 | 0.3 | 3.4 | 0.4 | 14.4 | 0.9 | 42.4 | 1.3 | 34.7 | 1.1 | 3.4 | 0.4 |
| 30. Provision of comprehensive orientation program for those newlyhired...................... | 2.9 | 0.4 | 3.0 | 0.3 | 12.5 | 0.8 | 33.0 | 1.0 | 45.2 | 1.2 | 3.4 | 0.4 |

SOURCE: 1985 National Nursing hOme Survey.

POPULATION: RNs in the contiguous 48 states and the District of Columbia.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Of the 12 items mentioned above, 5 of them were benefit-related (i.e., hospital, medical, and dental insurance, as well as vacation and retirement plans), 4 were salary-related (i.e., graduated salary plan for length of service and merit, and pay differential for holiday and weekend work), and 3 were related to work conditions (i.e., well-equipped facility, orientation program, and in-service education). None of these "top 10" was schedule-related, and only 1 could be considered as being related to professional growth (provision of in-service education).

The 10 factors that were rated as not important by the largest number of nurses are:

- Laundry of uniforms (54.0 percent)
- Subsidized housing (52.9 percent)
- Clinical supervision available by a master's prepared clinical specialist (33.4 percent)
- Use of a facility as a clinical center for nursing students (27.1 percent)
- Ability to arrange work hours to work rotating shifts (37.2 percent)
- Convenient public transportation (24.2 percent)
- Career counseling (24.1 percent)
- Child care facilities (21.6 percent)
- Meals at no cost or subsidized (20.6 percent)
- Ability to arrange work hours to work during weekends only (18.6 percent).

When the "not" and "slightly" important categories were combined, the "bottom 10" were the same although the order changed. The percentages of nurses rating the bottom 10 factors "not" or "slightly" important ranged from 32.0 to 52.6 percent, respectively. Only the first three factors listed above were considered "not" or only "slightly" important by the majority of nurses.

One-half of these less important factors are benefit related (i.e., laundry of uniforms, subsidized housing, convenient public transportation, child care facilities, and subsidized meals); three were related to the work conditions (i.e., clinical supervision by a master's prepared clinical specialist, use of the facility as a clinical center for nursing students, and career counseling); and two were schedule-related (ability to arrange work hours to work a rotating shift or weekends only). Salary or professional opportunity factors were not included in the bottom 10 list. Although these factors are less important in general, they still may be "all" or "very" important to certain nurses; e.g., nurses in an urban area may find public transportation all important, or nurses with preschool children may rate child care facilities high.

In reviewing the nurses' rating of the retention factors, in light of the postulated retention model, there appears to be support for inclusion of some of the factors in the model. Most of the retention factors included in the NNHS fall within the model categories of job rewards, job characteristics, and structural characteristics.

Job rewards include salary and fringe benefit factors. Obviously, the nurses rated many of these factors as being important to the retention of RNs in nursing homes. Seven of the "top 10" factors discussed earlier were either salary- or benefit-related. Fifty percent or more of the nurses found all the salary related issues to be "all" or "very" important to the retention of nurses.

The importance of fringe benefits to the retention of nurses was mixed, with some factors (such as hospital and medical insurance) being rated as the most important, and others (such as laundry of uniforms and subsidized housing) were being rated as least important. Those benefits rated by at least 50 percent of the nurses as "all" or "very" important, in addition to those benefits included in the top 10, are leave of absence for maternity, free parking, life insurance, release time with pay for continuing education, and reimbursement of expenses for continuing education. Obviously, the surveyed nurses perceived benefits, as a measure of job rewards, as being important to the retention of nurses in nursing homes.

Another category of nurse characteristics included in the postulated model is job characteristics. The only retention factors included in the NNHS list that can be considered as a job characteristic are those associated with the schedule. Of the eight schedule-related factors, three were rated all or very important by 50 percent or more of the nurses. These three were the ability to arrange work hours during child's school hours, child's school term, and day shift only. As mentioned before, none of them was in the "top 10." So schedule factors, as one job characteristic, is considered important to retention by the nurses, but not to the same degree as salary and benefits.

Structural characteristics, another nursing home factor included in the postulated model, involve working conditions that are controlled by the facility. Having a well-equipped facility with functional nursing units and the provision of a comprehensive orientation program were among the factors with the highest percentage of nurses indicating they were "all" or "very" important to the retention of nurses. Overall, 8 of 13 working-condition-related factors included in the survey were rated as "all" or "very" important to retention by 50 percent or more of the nurses; thus, the nurses supported the hypothesis that structural characteristics are important to the retention of nurses in nursing homes.

The opportunities available to a nurse to help her or him grow professionally were frequently mentioned as important to the retention of nurses in nursing homes. In assessing six professional opportunity-related factors, it was found that four of the six were viewed by 50 percent or more of the nurses as being "all" or "very" important to retention. These are the provision of in-service education, pay differential or separate salary scale by educational preparation, release time with pay for continuing education, and reimbursement of expenses for continuing education. Although none of these factors was in the "top 10," there appears to be sufficient indication that the availability of professional opportunities was important to the retention of nurses.

### b. Scaling the Importance of Retention Factors

To determine how the nurses' rating of the retention factors varied by selected RN and nursing home factors, the 45 retention factors were scaled. The first step in scaling the responses was to collapse the five-level importance scale into two levels--"all" and "very" important into one level and "not," "slightly," and "some" importance into the other level. Next, five substantive areas were developed based on the retention factors: working conditions, schedule, salary considerations, benefits, and professional opportunities. The retention factors included in each category are shown in Appendix H. The first four categories listed above include all the retention factors and are independent of each other. The fifth category, professional opportunities, includes factors related to professionalism, even though they are included in the other categories.

With the two importance levels collapsed and the five retention categories established, the importance of a category was determined by the number of retention factors a nurse rated as "all" or "very" important. For example, a nurse may have rated only two of the retention factors included in the benefit category as "all" or "very" important, and another nurse may rate 14 of these factors as "all" or "very" important.

The frequency of the responses in the as "all" or "very" important level were obtained for each retention area. Each area then was divided into three levels of importance--low, medium, and high. This scale is used in the following section in reviewing the importance of retention by RN and nursing homes characteristics. The low, medium, and high refer to the relative number of retention factors the nurse considered "all" or "very" important within a retention area. For example, there are 13 factors in the working conditions area. If a nurse rated 4 or fewer of these 13 factors as being "all" or "very" important, she or he would be included in the level that indicates working conditions are of low importance to retention. If she or he marks 5 to 9 of the working conditions as being important, she or he would fall into the medium level of importance. If she or he marked 10 or more factors as "all" or "very" important, she or he would fall into the high level of importance category. Note that, in this example, the low and high levels include four factors, and the middle category includes five. An attempt was made in scaling the categories to keep them symmetrical. If there had been 14 factors in the categories, the three levels would have included 5, 4, and 5 in the low, medium, and high levels, respectively. This is pointed out because the number and percentage of nurses included in a level is in part due to the scaling. This makes comparisons between areas, e.g., between benefits and salary, invalid. Thus, the comparisons in the following sections are made only within an area.

### c. Importance of Benefits to Retention

How the nurses' rating of benefits varied by their age and highest educational preparation and by the ownership and size is described in this section. The same format is used in subsequent sections for the other substantive areas. The detailed tables from which the discussion in this section is derived are in Appendix I-1.

In comparing the level of importance of benefits to retention of nurses by a nurse's age, it is found that, the younger the nurse, the higher the percentage of nurses who indicated a high level of importance. For example, 39.5 percent of the nurses in the under-35 age group indicated benefits are of high importance to retention, but only 29.0 percent of the nurses 55 to 64 years of age so indicated. The difference in these percentages is statistically highly significant.

When comparing how diploma and associate degree nurses view benefits, it is found that a statistically significant higher percentage of associate degree nurses rated the importance of benefits higher than did diploma nurses. The differences between nurses with an associate degree or diploma and nurses with a bachelor's degree were not statistically different. The estimated percentage of nurses rating the importance of benefits high was 37.7 for associate degree nurses, 36.2 for baccalaureate nurses, and 31.5 for diploma nurses. The difference in rating the importance of benefits between diploma nurses and associate and baccalaureate nurses may have been largely due to age because the diploma nurses are older and the older nurses may have been less interested in many of the benefits such as those related to education.

Nurses employed in nonprofit nursing homes were more likely to rate benefits as being of high importance than were nurses in proprietary homes. The estimated percentage of nurses employed in nonprofit nursing homes and who considered benefits of high importance was 36.9. For those nurses in proprietary homes the percentage was 30.2. The difference is statistically highly significant. The nurses in government-run nursing homes tended to rate the importance of benefits in a manner similar to nurses employed in nonprofit homes.

The differences in how nurses in small nursing homes (55 to 99 beds) and large nursing homes (200 beds and over) rated the importance of benefits are statistically highly significant. Nurses in smaller homes are less interested in benefits than were nurses working in the larger homes. Less than 27 percent of nurses employed in homes with 51 to 99 beds found benefits to be important, but 44.4 percent of nurses in nursing homes with 200 beds or more did

### d. Importance of Working Conditions to Retention

This section describes how the importance of working conditions to retention varies by the nurse's age and highest educational preparation, and the size and ownership of the nursing home. The tables on which this section is based are included in Appendix I-2.

When comparing nurses who are under 35 years of age to those 55 to 64, a statistically significant difference was found in the percentage of nurses who rate the importance of working conditions to retention as high. An estimated 40.4 percent of the nurses under 35 years of age rated working conditions as of high importance to retention in comparison to 32.0 percent for those nurses in the 55 to 64 age range.

How diploma and associate-degreed nurses rated the importance of working conditions to retention differed significantly. Approximately 39 percent (39.1 percent) of the nurses with an associate degree rated the importance of working conditions to retention as high, compared to 33.0 percent of nurses with diplomas. Differences among nurses with other educational preparation were not statistically different.

The importance of working conditions to retention did not statistically differ for nurses employed in nursing homes with different types of ownership although there was variation in the rating by the size of the nursing home. Of the nurses in nursing homes with 51 to 99 beds, 32.1 percent indicated that working conditions are of high importance to retention in comparison to 41.8 percent of the nurses in larger nursing homes (150 to 199 beds). This difference was statistically highly significant.

### e. Importance of Salary to Retention

How the RNs rated the importance of salary to the retention of RNs in nursing homes varied by selected nurse and nursing home characteristics is discussed in this section. The tables associated with this section are in Appendix J-3.

As in the preceding section on the importance of benefits and working conditions on retention, the nurses' rating of the importance of salary to retention varied with age. A higher percentage of the younger nurses (69.9 percent for those under 35) rated salary as important than did the older nurses (61.6 percent for nurses in the age range of 55 to 64). The difference is statistically significant.

Unlike preceding sections, the nurses rating of the importance of salary to retention of nurses' in nursing homes did not significantly vary by a nurse's highest education preparation.

A higher percentage of the nurses in government-run nursing homes (74.9 percent) rated salary as important to the retention of nurses than did nurses in proprietary (64.4 percent) nursing homes. This is a statistically highly significant difference. The difference in importance of salary to retention is not significant between the other classification of ownership.

Nurses who are employed in facilities with 50 or fewer beds were less likely to consider salary-related factors as being important to retention than do nurses in the larger facilities. An estimated 46.6 percent of the nurses in the facilities with 50 or fewer beds indicated salary-related factors as of high importance in comparison to 66.8 to 69.7 percent for those employed by larger nursing homes. The difference in the rating by the nurses in the smaller and larger facilities is statistically highly significant.

### f. Importance of Professional Opportunities to Retention

How the importance of having opportunities for professional growth varied by selected nurse and nursing home characteristic was also studied. The tables associated with professional opportunities are included in Appendix I-4.

In general, the older the nurse, the lower the percentage who considered professional opportunities as being of high importance to the retention of RNs. There is a statistically highly significant difference between the 36.4 percent of young nurses (under 35) who rated professional opportunities as being of high importance and 24.5 percent of nurses between 55 and 64 who so indicated.

A lower percentage of nurses whose highest educational preparation was a diploma rated having professional opportunities available as of high importance to retention (27.8 percent) than did associates or baccalaureate-degreed nurses (33.6 and 36.0 percent, respectively). The difference is statistically significant. There was no significant difference between the baccalaureate and associate-degreed nurse. As indicated earlier, age and highest educational preparation may have been interrelated because diploma nurses tend to be older.

The rating by nurses employed in facilities with different types of ownership showed no statistically significant differences among the percentage of nurses who rated professional opportunities as of high importance to retention.

As the size of the facilities increased, the percentage of nurses who rated professional opportunities as being important to retention also increased. The smaller facilities (50 or fewer beds) had 19.2 percent of their surveyed nurses indicate that professional opportunities were of high importance, while 40.6 percent of the nurses in the larger facilities (200 beds and over) so indicated. The difference was highly significant.

### g. Importance of the Schedule to Retention

This section addresses how the nurses' rating of the importance of the schedule to retention varied by the nurses' age, highest educational preparation, and the ownership and size of the facilities in which they are employed. Tables associated with this section are in Appendix I-5.

When assessing the percentage of nurses who rated the importance of schedule factors to retention, no statistically significant differences could be found among the various age, highest educational preparation, and ownership categories. Statistically significant differences were found among some facility sizes. As the size of the facility increased, the percentage of nurses who rated the importance of the schedule to retention increased. An estimated 27.3 percent of the nurses in the smaller facilities (50 beds or fewer) indicate that schedule is important to retention, and 35.9 percent of the nurses in facilities with 200 beds or more so indicate.

### h. Summary of Retention Factors Importance

Of the 45 retention factors assessed by the nurses, 28 (62.2 percent) were rated as "all" or "very" important to retention by at least 50 percent of the nurses. Almost 90 percent (88.7) of the nurses rated having a well-equipped facility with functional nursing units as "all" or "very" important to retaining RNs in nursing homes. Hospital, medical, and dental insurance, as well as some of the pay factors, also were high in the rankings. In addition, a high percentage of nurses considered the provision of comprehensive orientation program, graduated vacation plan, and a retirement plan as being important to the retention of RNs.

The surveyed nurses' assessment of the retention factors supported the postulated retention model in that job rewards (salary and benefits) and structural characteristics (working conditions) were important to the retention of nurses. Schedule factors, as one job characteristic, and professional opportunities were important to retention, but less so than job rewards and structural characteristics.

The retention factors were put into five groups--benefits, working conditions, salary, professional opportunities, and schedule. Variation in the percentage of the nurses' rating of these groups were assessed by the nurse's age, highest educational preparation, and the ownership and size of the facility.

For each factor (except those related to the schedule group), the percentage of nurses who indicated that the importance of the group of factors to retention decreased with age. Eight to eleven percent more young nurses (under 35 years old) considered benefits, working conditions, salary, and professional opportunities as important to retention than did nurses 55 to 64 years of age.

The percentage of diploma nurses indicating a group is of high importance was lower than the percentage of associate- and baccalaureate-degreed nurses (except for the schedule category). Statistically significant differences were found between diploma- and associate-degreed nurses for benefits, working conditions, and professional opportunities. The difference between the rating by diploma and baccalaureate-degreed nurses was found to be significant only as it related to professional opportunities. About 6 percent more associate-degreed nurses were in the high importance level than were diploma nurses for those categories where significant differences were found. Because the diploma nurses were older, this difference may have been an age-related effect.

Although a higher percentage of nurses in nonprofit facilities rated the five groups of retention factors higher than did nurses in proprietary facilities, the difference was, in general, not significant. Only in the nurses' assessment of benefit factors was there a significant difference. The only significant difference between the rating by nurses in government-run facilities was with nurses in proprietary homes for the salary category. A higher percentage of nurses in government-run facilities rated salary as important to retention than did nurses in proprietary homes.

As the size of the nursing home increased, the percentage of nurses who indicated that the five groups of retention factors were important to retention also increased. In each of the groups, there were sizes of nursing homes where the nurses' ratings were statistically highly different. The rating of the different groups of retention factors by nurses in large and small nursing homes differed by as much as 23 percent.

5. Retention Multivariate Analyses

Linear regression models were fit to data from the 1985 National Nursing Home Survey to determine which demographic, job characteristics, structural conditions, and other characteristics were related to the retention of nurses. The models were fit to predict the proportion of RNs with five or more years of experience who had worked at the facility for five or more years.

Tables 29, 30, 31, and 32 present the demographic characteristics, job characteristics, structural conditions, and other variables respectively that were considered for the regression models. Models were first fit considering these four types of variables separately. For each of the four types of variables, a sequence of models was run in order to select the variables to be involved in a final model. The sequence consisted of a model which included all variables in the group including age and years worked, a model with all variables excluding age and years worked, and models with age, years worked and each of the individual variables. Age and years worked were included in the models to remove the effect of age and experience. Categorical variables were entered into the models as zero-one indicators. A final model was fit for each of the four categories of independent variables; this model included any variable that was significant at the 5 percent level in any of the models. If any level of a categorical variable was significant, all levels of that variable were included in the final model. A combined model, which included all the variables in the four final models, was also fit.

Nine separate models were fit to determine which of the demographic characteristics in Table 29 had a significant effect on retention. The dependent variables in this sequence of models were:

- All variables
- Age and years worked only
- All variables, excluding age and years worked
- Race, age, and years worked
- Marital status, age, and years worked
- Children under 5 years old, age, and years worked

Table 29. RN demographic independent variables from the 1985 National Nursing Home Survey

---

Continuous variables

- Age of RN
- Number of years worked as an RN

Categorical variables

- Race
    - White*
    - Black
    - Other
- Marital status
    - Married
    - Divorced or separated
    - Widowed
    - Never married*
- Children
    - At least one child under 6 years old
    - All children at least 6 years old
    - No children*
- Highest education
    - Diploma*
    - Associate degree
    - BS in nursing
    - MS in nursing
    - Other degree
- Geriatric education indicator
- Continuing education indicator
- Other employment indicator

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*Reference cell

Table 30. RN job characteristic independent variables[1] from the 1985 National Nursing Home Survey

- Shift
  - Days*
  - Evenings
  - Nights
  - Rotating
- Type of position
  - General nursing*
  - Specialty nursing
  - Supervisor
  - Other
- Work activity indicators
  - Administering routine therapies
  - Administering complex therapies
  - Giving personal care
  - Observing and recording
  - Teaching and counseling patients
  - Determining individual patient care
  - Evaluating and modifying patient care plans
  - Assigning and supervising nurses giving care
  - Planning and providing recreation programs
  - Research
  - Conducting staff education
  - Attending staff education
  - Education of students
- Policy decision indicators
  - Institutional policy
  - Patient care policy
  - Personnel policy
- Full-time indicator

[1] All variables are categorical.

*Reference cell

Table 31. Facility structural condition independent variables from the 1985 National Nursing Home Survey

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Categorical variables

- Ownership
  - Proprietary*
  - Nonprofit
  - Government
- Chain status
  - Independent*
  - Small chain
  - Medium chain
  - Large chain
- Certification
  - SNF only
  - SNF and ICF
  - ICF only
  - Neither*
- Physicians services
  - On premises at least day time
  - On premises at scheduled times
  - On call only*
  - Other

Continuous variables

- Number of admissions per bed
- Number of services
- Full-time equivalent staffing per 1000 inpatient days
  - Administrator
  - RN
  - LPN/LVN
  - Nurses aides/orderlies
  - Physicians
  - Dentists
  - Pharmacists
  - Occupational therapists
  - Physical therapists
  - Speech pathologists/audiologists
  - Activities director
  - Dietician/nutritionist
  - Medical records administrator
  - Social worker
  - Radiological service
  - Other health professionals
  - Office staff
  - Food service
  - Housekeeping/maintenance
  - Other non-health
- Deaths per discharge

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*Reference cell

Table 32. Other independent variables from the 1985 National Nursing Home Survey

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Weekly salary

Hospital beds in county

State minimum RN requirements

- RN all shifts
- Full-time RN and director of nursing
- Full-time RN
- Director of nursing to be an RN
- No full-time RN required*

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*Reference cell

- Highest education, age, and years worked
- Geriatric education, age, and years worked
- Other demographic variables, age, and years worked.

All of the demographic variables except marital status were significant at the 5 percent level in at least one of these models, and were included in a final demographic characteristics model for retention.

A similar procedure was used to determine which of the job characteristics in Table 30 had a significant effect on retention. A sequence of seven models were fit. The dependent variables in the models were:

- All job characteristics, including age and years worked
- All job characteristics, excluding age and years worked
- Shift, age, and years worked
- Type of position, age, and years worked
- Work activity indicators, age, and years worked
- Policy decisions, age, and years worked
- Full-time indicator, age, and years worked.

The variables which were significant at the 5 percent level in any of these models were type of position; the work activity indicators for observing and recording, recreation programs, and attending staff education; the personnel policy decision indicator; and the full-time employment indicator.

A sequence of nine models was fit to determine structural variables given in Table 31 related to retention. These models included the independent variables:

- All variables, including age and years worked
- All variable, excluding age and years worked
- Size of facility (admissions per bed and number of services), age, and years worked
- Ownership, age, and years worked
- Ownership, chain status, age, and years worked
- Certification, age, and years worked
- Physician services, age, and years worked
- Full-time staffing per 1000 inpatient days, age, and years worked
- Deaths per discharge, age, and years worked.

The variables that were significant at the 5 percent level in one or more of these models were: admissions per bed, ownership, chain status, and the full-time equivalent staffing per 1,000 inpatient days for RNs, LPNs/LVN's, nurse aides, other health staff, office staff, housekeeping staff, and other nonhealth staff.

Models were also fit to select other variables (Table 32) that were not classified as demographic, job, or structural. These models included the independent variables:

- Salary, full-time indicator, age, and years worked
- State minimum RN requirements, age, and years worked
- Hospital beds in the county, age, and years.

The only variable with a significant effect on retention was weekly salary.

Table 33 presents the regression coefficients and their p-values for the final combined model and the final models for demographic characteristics, job characteristics, structural conditions and other variables. The RN's age and years worked was included in all of the models to remove the effects of experience on tenure in current facility. These two variables were always highly statistically significant.

Table 33. Effect of demographic, job, structural, and other characteristics on the proportion of RNs working in the same facility for 5 or more years, for RNs who have worked as a nurse for at least 5 years

| | Combined | | Demographic | | Job char. | | Structural | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value |
| Multiple correlation (%)....... | 15.93 | 0.0000 | 9.86 | 0.0000 | 7.06 | 0.0000 | 9.68 | 0.0000 | 5.58 | 0.0000 |
| Demographic characteristics | | | | | | | | | | |
| Age......................... | 0.006 | 0.0087 | 0.008 | 0.0026 | 0.005 | 0.0097 | 0.004 | 0.0225 | 0.005 | 0.0198 |
| Years worked............... | 0.007 | 0.0007 | 0.008 | 0.0018 | 0.008 | 0.0001 | 0.007 | 0.0000 | 0.007 | 0.0009 |
| Race | | | | | | | | | | |
| White..................... | | | * | | | | | | | |
| Black..................... | -0.162 | 0.0369 | -0.090 | 0.2349 | | | | | | |
| Other..................... | -0.122 | 0.1153 | -0.122 | 0.0645 | | | | | | |
| Children | | | | | | | | | | |
| One or more < 6 yrs....... | 0.072 | 0.1914 | 0.047 | 0.3623 | | | | | | |
| All 6 yrs or more......... | 0.055 | 0.0874 | 0.056 | 0.0832 | | | | | | |
| None...................... | * | | * | | | | | | | |
| Education level | | | | | | | | | | |
| Associate degree.......... | -0.006 | 0.8206 | -0.075 | 0.0693 | | | | | | |
| Diploma................... | * | | * | | | | | | | |
| B.S. in nursing........... | -0.094 | 0.0516 | -0.135 | 0.0026 | | | | | | |
| M.S. in nursing........... | -0.146 | 0.1692 | -0.776 | 0.4246 | | | | | | |
| Other degree.............. | -0.281 | 0.0000 | -0.249 | 0.0000 | | | | | | |
| Geriatric edu. indi. ....... | 0.165 | 0.0244 | 0.177 | 0.0271 | | | | | | |
| Continuing edu. indi. ...... | 0.070 | 0.0792 | 0.106 | 0.0030 | | | | | | |
| Other employment........... | -0.113 | 0.0077 | -0 151 | 0.0001 | | | | | | |
| Job characteristics | | | | | | | | | | |
| Position type | | | | | | | | | | |
| General nursing........... | * | | | | * | | | | | |
| Specialist nurse.......... | 1.4e-04 | 0.9996 | | | -0.137 | 0.0688 | | | | |
| Supervisor ............... | 0.026 | 0.4612 | | | -0.020 | 0.5587 | | | | |
| Other..................... | 0.063 | 0.5279 | | | 0.016 | 0.8712 | | | | |
| Work activity............... | | | | | | | | | | |
| Observing and recording.. | -0.021 | 0.5981 | | | -0.066 | 0.0242 | | | | |
| Recreation programs....... | -0.147 | 0.0025 | | | -0.094 | 0.0455 | | | | |
| Attending staff edu. ..... | 0.061 | 0.0703 | | | 0.091 | 0.0094 | | | | |
| Policy decisions | | | | | | | | | | |
| Personnel................. | 0.070 | 0.0458 | | | 0.075 | 0.0351 | | | | |
| Structural conditions | | | | | | | | | | |
| Ownership | | | | | | | | | | |
| Proprietary............... | * | | | | | | | | | |
| Nonprofit................. | 0.034 | 0.3113 | | | | | 0.025 | 0.4631 | | |
| Government................ | 0.034 | 0.5505 | | | | | 0.026 | 0.6410 | | |
| Chain status | | | | | | | | | | |
| Independent............... | * | | | | | | * | | | |
| Small..................... | -0.098 | 0.0178 | | | | | -0.079 | 0.0546 | | |
| Medium.................... | -0.121 | 0.0181 | | | | | -0.129 | 0.0078 | | |
| Large..................... | -0.083 | 0.0696 | | | | | -0.066 | 0.1275 | | |
| FTE's per 1000 inpat. days | | | | | | | | | | |
| RN........................ | 0.277 | 0.0058 | | | | | 0.316 | 0.0022 | | |
| LPN/LVN................... | -0.158 | 0.0672 | | | | | -0.181 | 0.0241 | | |
| Nurse aides............... | -0.060 | 0.1109 | | | | | -0.077 | 0.0210 | | |
| Other health.............. | -0.149 | 0.4555 | | | | | -0.102 | 0.5177 | | |
| Office staff.............. | -0.246 | 0.0461 | | | | | -0.359 | 0.0085 | | |
| Housekeeping.............. | 0.071 | 0.3025 | | | | | 0.148 | 0.0278 | | |
| Other nonhealth........... | 0.153 | 0.0066 | | | | | 0.160 | 0.0109 | | |
| Admissions per bed.......... | 0.006 | 0.4385 | | | | | 0.005 | 0.5338 | | |
| Other variables | | | | | | | | | | |
| Weekly salary............... | 2.9e-4 | 0.0215 | | | | | | | 4.0e-4 | 0.0139 |
| Fulltime indicator.......... | -0.058 | 0.1446 | | | | | | | -0.069 | 0.1604 |

*Reference cell

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and the District of Columbia with 5 or more years of experience.

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Among the demographic variables, the education and training effects were the most important. All levels of education, except possibly an M.S. in nursing, were associated with a reduced proportion of RNs having been in the same facility for more than 5 years when compared to diploma-trained RNs. In addition, both geriatric training and continuing education were associated with a higher proportion having been in the same facility at least 5 years. Finally, having other employment reduced the proportion having been in the same facility for more than 5 years.

Of the job characteristics, attending staff education and making policy decisions increased the proportion with long tenure. On the other hand, the work activities of observing and recording reduced this proportion. All of these effects (except attending staff education) may be artifacts of the natural progression of an RN's career in a nursing home.

Under structural characteristics, nursing homes in a chain had a reduced proportion of RNs having worked at the facility more than 5 years. The possibility of staff substitution was suggested by the the negative coefficient for LPNs/LVNs, nurses aides and office staff full-time equivalents per 1000 inpatient days. A positive coefficient was associated with staffing of RNs, housekeeping and other nonhealth personnel. Finally, a positive coefficient was noted for weekly salary.

Additional multivariate study of RN retention in nursing homes was done using the 1984 National Sample Survey of Registered Nurses (NSSRN). Linear regression models were fit to study the proportion of RNs currently working in nursing homes that had changed jobs within the last year. Table 34 presents the results for this part of the study. For this analysis, the independent variables were classified as demographic, job characteristics and salary as shown in the table. Models for each group of variables were fit separately and then in an overall combined model. In addition, marital status and presence of children was considered as a single combined variable and as two distinct effects. As noted earlier, the regression analyses were produced using ordinary least squares, weighted to select the unequal probabilities of selection. Hence, the p-values in these tables should be interpreted conservatively.

The RN's age and years since graduation were both negatively associated with the proportion of RNs working in nursing homes that have changed jobs in the last year. Similarly, a smaller proportion of administrative and

Table 34. Regression analyses of the proportion of RNs changing jobs within the last year.

| | Combined | | | | Demographic | | | | Job Char. | | Salary | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Model 1 | | Model 2 | | Model 1 | | Model 2 | | | | | |
| | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value |
| Multiple correlation (%) | 14.0 | 0.0001 | 13.9 | 0.0001 | 9.1 | 0.0001 | 9.4 | 0.0001 | 11.9 | 0.0001 | 2.1 | 0.0001 |
| **Demographic characteristics** | | | | | | | | | | | | |
| Age | -0.0050 | 0.0055 | -0.0050 | 0.0071 | -0.0100 | 0.0001 | -0.0100 | 0.0001 | | | | |
| Race | | | | | | | | | | | | |
| Other (Hispanic/Indian/Asian/Pacific) | -0.0620 | 0.2442 | -0.0640 | 0.2374 | -0.0730 | 0.1372 | -0.0760 | 0.1294 | | | | |
| Black (not Hispanic) | -0.0420 | 0.4181 | -0.0320 | 0.5418 | -0.0830 | 0.0943 | -0.0700 | 0.1631 | | | | |
| White (not Hispanic) * | | | | | | | | | | | | |
| Marital status with children | | | | | | | | | | | | |
| Married, all children < 6 yrs | -0.1010 | 0.0526 | | | -0.0670 | 0.1755 | | | | | | |
| Married, all children >= 6 yrs | -0.0310 | 0.4337 | | | -0.0230 | 0.5240 | | | | | | |
| Married with children both ages | -0.1190 | 0.0268 | | | -0.0990 | 0.0465 | | | | | | |
| Married, no children | 0.0250 | 0.5342 | | | 0.0250 | 0.5236 | | | | | | |
| Married, child's age unknown | -0.0730 | 0.6861 | | | -0.0140 | 0.9323 | | | | | | |
| Never married * | | | | | | | | | | | | |
| Widowed, separated, divorced | 0.0610 | 0.1592 | | | 0.0640 | 0.1117 | | | | | | |
| Marital status | | | | | | | | | | | | |
| Married, spouse present | | | 0.0240 | 0.5762 | | | 0.0310 | 0.4574 | | | | |
| Married, spouse absent/wid.,div.,sep. | | | 0.0930 | 0.0470 | | | 0.0980 | 0.0311 | | | | |
| Never married * | | | | | | | | | | | | |
| Children | | | | | | | | | | | | |
| No children * | | | | | | | | | | | | |
| All children < 6 yrs | | | -0.1070 | 0.0160 | | | -0.0970 | 0.0244 | | | | |
| All children >= 6 yrs | | | -0.0700 | 0.0037 | | | -0.0840 | 0.0003 | | | | |
| Children both ages | | | -0.1490 | 0.0009 | | | -0.1450 | 0.0007 | | | | |
| Highest education | | | | | | | | | | | | |
| Diploma * | | | | | | | | | | | | |
| Associate | 0.0410 | 0.2264 | 0.0340 | 0.3115 | 0.1060 | 0.0001 | 0.0980 | 0.0002 | | | | |
| BS nursing | 0.0150 | 0.6451 | 0.0120 | 0.7215 | 0.0260 | 0.3985 | 0.0230 | 0.4570 | | | | |
| BS another field | 0.0240 | 0.6966 | 0.0170 | 0.7859 | 0.0300 | 0.6019 | 0.0240 | 0.6702 | | | | |
| MS nursing/another field | 0.0760 | 0.2862 | 0.0350 | 0.6290 | 0.0280 | 0.6694 | -0.0040 | 0.9485 | | | | |
| **Job characteristics** | | | | | | | | | | | | |
| Temporary employment service | 0.2320 | 0.0021 | 0.2390 | 0.0018 | | | | | 0.2650 | 0.0001 | | |
| Work schedule | | | | | | | | | | | | |
| Full-time * | | | | | | | | | | | | |
| Part-time | -0.0470 | 0.1002 | -0.0420 | 0.1449 | | | | | -0.0080 | 0.7252 | -0.0870 | 0.0020 |
| Part-year | 0.0080 | 0.8760 | 0.0080 | 0.8785 | | | | | 0.0420 | 0.3201 | -0.1060 | 0.0312 |
| Other employment indicator | 0.0090 | 0.8238 | 0.0200 | 0.6325 | | | | | -0.0040 | 0.9082 | | |
| Type of position | | | | | | | | | | | | |
| Staff * | | | | | | | | | | | | |
| Speciality | -0.0980 | 0.5185 | -0.0750 | 0.6218 | | | | | -0.1140 | 0.4067 | | |
| Administration | -0.0950 | 0.0001 | -0.0930 | 0.0001 | | | | | -0.1240 | 0.0001 | | |
| Head nurse | -0.1040 | 0.0234 | -0.0940 | 0.0430 | | | | | -0.0970 | 0.0238 | | |
| Other | -0.0740 | 0.0858 | -0.0680 | 0.1192 | | | | | -0.0850 | 0.0289 | | |
| Years since graduation | -0.0060 | 0.0008 | -0.0070 | 0.0007 | | | | | -0.0100 | 0.0001 | | |
| **Salary** | | | | | | | | | | | | |
| Weekly salary | -0.0004 | 0.0001 | -0.0003 | 0.0002 | | | | | | | -0.0010 | 0.0001 |

* Reference cell

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed in nursing homes in the U.S. in 1984 (including nurses employed through contracts and temporary employment services).

head nurses had changed jobs recently when compared with staff nurses. That is, a higher proportion of older and more experienced RNs have been working in the same nursing home for at least one year than younger and less experienced nurses.

Two other variables diminished the proportion of RNs having changed jobs in the last years. RNs with a higher weekly salary are less likely to have changed jobs recently. We also see that RNs with children are less likely than those without children to have changed jobs in the last year. This may result from RNs with children having left the job market to have children prior to the conduct of the 1984 NSSRN and thus, could not be included in this part of the study.

The only factors positively associated with changing jobs within the last year were being employed through a temporary employment service and being widowed, separated, divorced or married with the spouse absent.

## C. Recruitment of RNs in Nursing Homes

### 1. Introduction

RN recruitment is concerned with the process that leads to the hiring of nurses. In this section, the factors that may affect recruitment are presented and discussed. In the discussion of the postulated model for recruitment (Section III.B.3), the similarity of the measures for retention and recruitment is mentioned. These measures are the 1-year change in the RN's employment status, number of years the RN has worked in a facility, and the importance of working conditions, schedule, salary, benefits, and professional opportunities to retaining or recruitment a nurse. Although the measures are similar, the recruitment assessment uses different aspects of the measure than does the retention assessment. How the measures are used in relationship to recruitment is described in the following sections.

### 2. One-Year Change in the RN's Employment Status

The NSSRN data permit determining the 1-year change in employment status of RNs. In this section, nurses who have been with an employer for less than 1-year are described in terms of their characteristics, employment setting, and prior employment status. The meaning of a 1-year change in employment, as well as what facilities are included in the various settings, is discussed in Section IV.B.2 and will not be repeated here. Tables on which this section is based are presented in Appendix E.

### a. Recruitment of RNs by Setting

An estimated 24.2 percent of nursing home nurses, 15.8 percent of hospital nurses, and 23.6 percent of nurses in settings other than hospitals and nursing homes had been hired by their present employer within the previous year. The RN staff in nursing homes had 8.4 percent more newly hired nurses than did hospitals. This difference could be due to differential expansion between nursing homes and hospitals, higher turnover in nursing homes than in hospitals, or a differential rate of change in the staffing ratios (e.g., nursing homes were increasing the number of RNs per bed at a higher rate than hospitals did). The data could support any of these hypotheses.

Table 35 provides information on the prior status of newly hired nurses by setting. For all three settings, the majority of recently employed nurses were those who were employed 1 year previously by another employer. It is not known whether these nurses were previously employed in the same setting or whether they changed settings. For nursing homes and hospitals, about 55 percent of the new RN employees came from a different employer. About 2 of every 3 nursing home nurses who were not employed the previous year were licensed. For hospitals the number of licensed and nonlicensed nurses who were not employed the previous year was about equal. Thus, hospitals relied more on newly licensed nurses than did nursing homes.

Settings other than nursing homes and hospitals had a much higher proportion of their new nurses who had a different employer a year earlier (70.8 percent). These other settings had a very low percentage of their new nurses who had been recently licensed. Most of the newly hired nurses who were not employed in nursing a year earlier were licensed. Other settings, then, had a much higher proportion of their newly hired nurses coming from other employers than did either nursing homes or hospitals, and they had a smaller proportion who had recently received a license.

Hospitals, in terms of both numbers and percent of RNs, had many more newly licensed nurses than did nursing homes and other settings. Other settings had fewer newly licensed nurses than even nursing homes did. Obviously, many nurses obtained a license and worked in hospitals before they were employed by nursing homes and other settings.

Table 35. Source of new employees by setting by whether the nurse had a different employer, was not employed in nursing, or was not licensed on November 15, 1983.

| Setting | Total | | Different employer | | Not employed or licensed | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Total.... | 272,215 | 100.0 | 165,490 | 60.8 | 106,725 | 39.2 |
| Nursing homes. | 27,870 | 100.0 | 15,433 | 55.4 | 12,437 | 44.6 |
| Hospitals..... | 159,753 | 100.0 | 90,160 | 56.4 | 69,593 | 43.6 |
| Other settings | 84,592 | 100.0 | 59,897 | 70.8 | 24,695 | 29.2 |

SOURCE: 1984 National Sample Survey of Registered Nurses
POPULATION: RNs employed as RNs in the U.S. in 1984 and were employed by another employer, was licensed but not employed, or was not licensed a year earlier in 1983.

### b. Recruitment of RNs in Nursing Homes by Age

In looking at the age distribution for the newly hired nurses for all settings, it can be observed that the majority of the nurses in all settings were under 35 years of age with the percentage of new hires for subsequent age groups roughly 1-half of the previous age group (see Table 36). The nurses who were hired by a nursing home and who were employed elsewhere a year earlier tended to be older than those hired by either hospitals or by other settings; i.e., nursing homes were under represented in the younger age groups and over represented in the older age groups. A very large proportion (68.1 percent) of the nurses who were employed elsewhere the previous year and hired by hospitals were under 35 years of age. Only 35.1 percent of nurses hired by nursing homes from other settings were under 35 years of age.

The newly hired nursing home nurses who previously either were not employed or not licensed also tended to be older than those hired by hospitals, but younger than those employed in other settings. Again, hospitals had a large proportion (69.3 percent) of their new hires in the under-35 age group.

### c. Recruitment of RNs in Nursing Homes by the Number of Years Since Graduation

Table 36 also shows the newly hired nurses by the number of years since they graduated from their basic nursing preparation program.

Table 36. Percent of RNs hired who had a different employer, were not licensed, or were not employed the previous year by age, number of years since graduation, and highest educational preparation.

| Nurses' characteristics | Total: Different employer | Total: Not employed or licensed | Nursing homes: Different employer | Nursing homes: Not employed or licensed | Hospitals: Different employer | Hospitals: Not employed or licensed | Other settings: Different employer | Other settings: Not employed or licensed |
|---|---|---|---|---|---|---|---|---|
| Total number. | 165,490 | 108,725 | 15,433 | 12,437 | 90,160 | 69,593 | 59,897 | 24,695 |
| Age | | | | | | | | |
| Total... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 35..... | 57.0 | 58.8 | 35.1 | 50.1 | 68.1 | 69.3 | 46.0 | 33.6 |
| 35 to 44..... | 25.0 | 22.8 | 27.7 | 18.8 | 21.5 | 18.5 | 29.5 | 37.1 |
| 45 to 54..... | 10.6 | 11.9 | 16.8 | 17.7 | 6.6 | 8.0 | 15.1 | 19.8 |
| 55 to 64..... | 5.1 | 4.8 | 16.8 | 9.1(*) | 2.1 | 3.2 | 6.5 | 7.1 |
| 65 and over.. | 0.6(*) | 0.9(*) | 1.6(*) | 2.5(*) | 0.2(*) | 0.2(*) | 1.0(*) | 1.9(*) |
| Unknown...... | 1.7 | 0.8(*) | 1.9(*) | 1.8(*) | 1.6(*) | 0.8(*) | 1.9(*) | 0.5(*) |
| Number of years since graduation | | | | | | | | |
| Total... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under 5...... | 25.9 | 50.5 | 18.6 | 39.5 | 33.3 | 64.0 | 16.7 | 17.8 |
| 5 to 9....... | 30.9 | 12.0 | 20.9 | 10.0 | 34.2 | 11.7 | 28.5 | 14.0 |
| 10 to 14..... | 15.1 | 10.8 | 9.9 | 11.6 | 14.7 | 8.5 | 17.0 | 16.9 |
| 15 or more... | 27.6 | 25.9 | 49.6 | 37.8 | 17.4 | 15.3 | 37.3 | 49.7 |
| Unknown...... | 0.5(*) | 0.8(*) | 1.0(*) | 1.0(*) | 0.4(*) | 0.5(*) | 0.5(*) | 1.5(*) |
| Highest educational preparation | | | | | | | | |
| Total... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Diploma........ | 31.2 | 29.0 | 50.6 | 39.7 | 27.8 | 24.6 | 31.5 | 35.5 |
| Associate degree | 29.2 | 34.8 | 30.5 | 37.3 | 32.3 | 37.7 | 24.1 | 25.6 |
| Baccalaureate in nursing....... | 29.9 | 28.8 | 12.3 | 17.7 | 32.0 | 32.6 | 31.1 | 23.7 |
| Other.......... | 9.2 | 6.9 | 6.2(*) | 3.5(*) | 7.3 | 4.8 | 12.8 | 14.5 |
| Unknown........ | 0.5(*) | 0.4(*) | 0.3(*) | 1.8(*) | 0.6(*) | 0.1(*) | 0.5(*) | 0.7(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNs employed as RNs in the U.S. in 1984 and were employed by another employer, was licensed but not employed, or was not licensed a year earlier in 1983.

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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In comparing recently hired nurses in nursing homes and hospitals, it is evident that hospitals were much more likely to hire the more recently graduated nurse than were nursing homes. For example, nurses with fewer than 5 years since graduation and who were not employed or licensed during the previous year accounted for 64.0 percent of the hospital's new employees, but only 39.5 percent of the nursing home's new hires. This is almost a 25-percent difference. As another example, those nurses who graduated 15 or more years earlier and who were employed in nursing elsewhere a year earlier accounted for 49.6 percent of nursing home nurses but only 17.4 percent of hospital nurses; this is a 32-percent difference.

In comparing the proportion of nurses recently hired by nursing homes and those hired by settings other than hospitals and nursing homes, the difference is not quite as dramatic as it was for hospitals. The exception is for nurses who had graduated fewer than 5 years ago and were previously not employed or licensed. Nursing homes hired 39.5 percent of these nurses versus 17.8 percent for other settings. This is consistent with the finding that other settings hired very few newly licensed nurses. Both settings (nursing homes and other) tended to hire a disproportionate number of nurses who had graduated from their basic nursing education program 15 years ago or more.

### d. Recruitment of RNs in Nursing Homes by Each Nurse's Highest Educational Preparation

Table 36 also shows how the recently hired RN varies by the highest educational preparation. For all settings, diploma-prepared, associate-degree-prepared, and baccalaureate-prepared nurses were each about 30 percent of the recently hired nurses. Roughly 10 percent were nurses whose highest preparation was a baccalaureate, master's, or doctorate in a nursing-related field or a master's or doctorate in nursing. Nursing homes tended to have more diploma nurses and fewer baccalaureate nurses than the average for all settings. An estimated 50.6 percent of the nurses recently hired by nursing homes who were employed elsewhere 1 year previously had diplomas as their highest preparation, and 12.3 percent had a baccalaureate in nursing. Thus, the nurses hired by nursing homes who a year earlier had worked for another employer were predominantly diploma nurses. This same general relationship holds true for nurses who were previously not employed in nursing or not licensed; however, the difference was not so great--39.7 percent diploma nurses and 17.7 percent baccalaureate nurses. The proportion of newly hired nurses who had an associate degree as their highest preparation was similar to the proportion for all settings.

Nursing homes' recent hires, when compared to new hires in hospitals, had a much larger proportion of diploma nurses than did hospitals and a lower proportion of baccalaureate nurses. The proportion who were associate degreed nurses was about the same.

In comparing the highest preparation between nursing homes and settings other than hospitals and nursing homes, nursing homes had a larger proportion of diploma-prepared and associate-degreed-prepared nurses and a lower proportion of baccalaureate prepared nurses than did other settings. Other settings also appeared to have a larger percentage of nurses with advanced degrees.

### e. Recruitment of RNs in Nursing Homes by Position

Table 37 presents the information on newly hired nurses by position. Included in the caregiver position are nurses with titles such as charge nurse, general duty nurse, public health nurse, school nurse, staff nurse, and team leader, as well as nurse specialist such as certified nurse anesthetist, clinical nurse specialist, nurse midwife, and nurse practitioner. The supervisor position includes nurses with titles such as administrator, director of nursing, head nurse, and supervisor. The other category includes consultant, instructor, professor, and researcher.

For all settings, the caregivers were the most predominant. The proportion of caregivers was larger (84.6 percent) for those recently hired nurses who were either not employed in nursing or not licensed 1 year earlier than for the new hires who had been employed the previous year (73.2 percent). This is reasonable because newly licensed nurses were more likely to be hired at an entry-level caregiver position than would be RNs with nursing experience. Nurses who had changed jobs in the past year had a higher probability of being in the supervisory category.

The recently hired nurses in nursing homes were over represented in the supervisory category. An estimated 35.5 percent of the recently hired nursing home RNs who changed employers from a year earlier were in the

Table 37. Percent of RNs hired who had a different employer, were not licensed, or were not employed during the previous year by position.

| | Total | | Nursing homes | | Hospitals | | Other settings | |
|---|---|---|---|---|---|---|---|---|
| | Different employer | Not employed or licensed | Different employer | Not employed or licensed | Different employer | Not employed or licensed | Different employer | Not employed or licensed |
| Total | | | | | | | | |
| Number.... | 165,490 | 106,725 | 15,433 | 12,437 | 90,160 | 69,593 | 59,897 | 24,695 |
| Percent.... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Caregiver..... | 73.2 | 84.6 | 57.7 | 72.7 | 85.2 | 93.6 | 59.0 | 65.3 |
| Supervisor.... | 13.2 | 6.7 | 35.5 | 21.5 | 9.8 | 3.9 | 12.5 | 7.2 |
| Other......... | 13.7 | 8.7 | 6.7(*) | 5.8(*) | 5.0 | 2.5 | 28.5 | 27.5 |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNs employed as RNs in the U.S. in 1984 and were employed by another employer, was licensed but not employed, or was not licensed a year earlier in 1983.

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

supervisory category, compared to 9.8 for hospitals. For the new hires who were previously not employed or licensed, the proportion in the supervisor category was 21.5 and 3.9 percent for nursing homes and hospitals, respectively. Again, this represents a large difference. As would be expected, these were primarily nurses who had not been employed a year earlier as opposed to the newly licensed nurse.

When comparing recently hired nurses in nursing homes and other settings, the larger proportion of other-setting nurses in the other position category is apparent. This is because some of the settings included in the "other setting" category (e.g. nursing education, governments and health associations) will disproportionally attract nurses in the "other" nurse category (e.g. nurse educators, researchers, and consultants).

### f. Recruitment of RNs in Nursing Homes by the Average Weekly Salary of Full-time Nurses

In Table 38, the proportion of RNs who were recently hired is presented as a function of salary. For all settings, the salary of nurses who were employed by a different employer 1 year earlier tended to be higher then the salary of those who previously either were not employed or not licensed. RNs who were licensed but not employed in nursing 1 year earlier may have started at lower salaries than did active nurses of a similar age (depending on how long they were out of nursing).

Although the small sample size limits what can be said about the salaries of nurses recently hired by nursing homes, the data suggest that a higher proportion of nursing home RNs were in the lower salary groups than were RNs employed by either hospitals or other settings. An estimated 59.9 percent of nursing home RNs who had worked for another employer a year earlier earned less than $400 per week compared to 37.0 percent for hospitals. Thus over 20 percent more of these nursing home RNs than hospital RNs were in the lower two salary groups.

### g. Discussion of Findings

The majority of nurses (53.4 percent) hired by nursing homes were working in nursing for another employer a year earlier on November 15, 1983. New nursing employees in nursing homes tended to be older than for all settings and much older than the RNs being hired by hospitals. In another age-related variable--number of years since a nurse graduated from

Table 38. Percent of RNs hired who had a different employer, were not licensed, or were not employed during the previous year by salary of full-time RNs.

| Salary of full-time RNs | Total | | Nursing homes | | Hospitals | | Other settings | |
|---|---|---|---|---|---|---|---|---|
| | Different employer | Not employed or licensed | Different employer | Not employed or licensed | Different employer | Not employed or licensed | Different employer | Not employed or licensed |
| Total | | | | | | | | |
| Number.... | 113,169 | 61,659 | 10,426 | 5,702 | 85,160 | 45,714 | 37,583 | 10,243 |
| Percent... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Under $300.... | 8.2 | 16.4 | 20.3 | 30.3 | 3.4 | 11.3 | 13.3 | 31.4 |
| $300 to $399.. | 35.9 | 43.0 | 39.6 | 50.5 | 33.6 | 44.5 | 38.9 | 32.1 |
| $400 to $499.. | 34.9 | 25.6 | 25.9 | 11.2(*) | 39.5 | 29.3 | 29.2 | 16.7 |
| $500 and above | 16.5 | 8.7 | 7.8(*) | 1.3(*) | 18.3 | 9.9 | 15.9 | 7.8(*) |
| Unknown....... | 4.4 | 6.3 | 6.3(*) | 6.9(*) | 5.1 | 5.0 | 2.7(*) | 12.0(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: Nurses employed full-time as RNs in the U.S. in 1984 and were employed by another employer, was licensed but not employed, or was not licensed a year earlier in 1983.

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

her/his basic nursing education program--nursing homes tended to hire a disproportionate share of nurses who had graduated from their basic nursing education program 15 or more years earlier. RNs recently hired by nursing homes also included a disproportionate share of diploma nurses.

A higher proportion of nursing home new employees went into supervisory positions than did hospital nurses, although a majority of the new nursing home RNs were primarily caregivers. A higher proportion of the nursing home recent hires were represented in the lower salary categories than were hospital new employees; thus, on the average, new nursing home nurses were paid less than hospital nurses were.

### 3. Characteristics of RNs Who Had Been Employed by a Facility for Less Than 1 Year

As stated before, RNs included in the NNHS were requested to check one of five categories indicating how many years they had worked in the same facility. This section focuses on those nurses who had been with the facility for less than 1 year, i.e., the new employees. An estimated 20,727 RNs, or 20.8 percent of nursing home employees, had been with their respective facilities for less than 1 year. In order to discern how the RNs being recruited by nursing homes differed from their existing staff, the new employees are compared to those RNs who have been with a nursing home for 5 or more years. These comparisons are made for a variety of nurse and nursing home characteristics. (See Appendix G for related tables.)

#### a. Recently Hired RNs by Prior Employment Status

In the NNHS nurses were asked about their employment status immediately prior to taking their current nursing home job. As can be seen in Table 39, 10.6 percent of the new employees indicated that the nursing home employment was their first job, 72.1 percent reported having been previously employed in nursing, and 14.7 percent checked they had not been employed in nursing just before taking their current job. The 72.1 percent of the nurses who were employed elsewhere in nursing were previously employed in nursing homes (31.1 percent), hospitals (28.5 percent), and other settings (12.5 percent). New employees then, are primarily coming from other employers and these employers are primarily other nursing homes and hospitals.

Table 39. Nurses who had worked less than 1 year or 5 or more years in a nursing home by the RNs prior employment status.

| Prior employment status | Less than 1 year Number | Less than 1 year Percent | 5 or more years Number | 5 or more years Percent |
|---|---|---|---|---|
| Total................ | 20,727 | 100.0 | 40,642 | 100.0 |
| First job................. | 2,189 | 10.6 | 1,559 | 3.8 |
| Another nursing home...... | 6,414 | 30.9 | 8,812 | 21.7 |
| Hospital.................. | 5,880 | 28.4 | 12,194 | 30.0 |
| Other setting............. | 2,586 | 12.5 | 4,316 | 10.6 |
| Not employed in nursing... | 3,022 | 14.6 | 12,572 | 30.9 |
| Unknown................... | 637(*) | 3.1(*) | 1,188 | 2.9 |

SOURCE: 1985 National Nursing Home Survey.
POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).
NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

In comparing the recently hired nurses and those who had been with the facility 5 or more years, it is interesting that fewer new hires than the more experienced nurse are coming from the pool of nurses who were previously not employed in nursing. Only 14.7 percent of the new nurses and 31.1 percent of nurses with 5 or more years experience with the same facility were previously not employed in nursing. The perception was that nursing homes hired a large proportion of their nurses from the pool of nurses who quit their job to raise a family and then came back into nursing. The data supports that this is the way it was but is no longer. Of course, some still follow that pattern but the proportion is much smaller.

The lower proportion of nurses coming from those previously not employed in nursing is made up by larger proportions of nurses coming from other nursing homes and those who have accepted their first job (presumably those who have recently been licensed). Hiring nurses form other nursing homes may help a facility in meeting their staffing requirements but does not increase the number of RN working in nursing homes.

### b. Recently Hired RNs by Age

As would be expected, a large number of the recently hired RNs were under 35 years of age (8,164 or 39.4 percent); however, a majority of the new employees were older (see Table 40). An estimated 26.2 percent of the nurses were between 35 and 44 years of age, and 22.2 percent were between 45 and 54; thus, nursing homes were hiring the older nurse as well as the younger nurse. As expected, these new employees tended to be younger than the nurses who had been employed 5 or more years.

### c. Recently Hired RNs by Highest Educational Preparation

Nursing homes hired 7,597 nurses whose highest educational preparation was a diploma (see Table 40). This represented 36.7 percent of their recently hired RNs. The next most prominant highest preparation category was nurses with an associate degree (33.8 percent), followed by baccalaureate-prepared nurses and nurses who either had an advanced degree in nursing or had a bachelor's or higher degree in a nursing-related field. These new hires included both newly licensed nurses as well as nurses who had a license for some time.

The profile by highest educational preparation for nurses with 5 or more years with a nursing home is quite different than that for the recent hires. An estimated 71.9 percent of these nurses who had been with the facility longer had as their highest educational preparation a diploma, and 13.4 and 9.0 percent had an associate or baccalaureate degree, respectively. The nursing home staff will drift toward having a larger proportion of associate- and baccalaureate-degreed nurses and a lower proportion of diploma nurses if the indicated hiring pattern continues and the turnover rate is the same for all types of preparation. Part of the reason for the changing educational preparation profile is that a larger proportion of the new graduates are coming from associate degree programs and a lower proportion from diploma programs (ANA, 1985).

### d. Recently Hired RNs by Marital Status

As shown in Table 40, the majority (62.9 percent) of recently hired nurses were married. This is a lower proportion than the 72.4 percent for the RNs who had been with their respective facilities for 5 or more years.

Table 40. Nurses who have worked less than 1 year or 5 or more years in a nursing home by nurse characteristics.

| Nurse characteristics | Less than 1 year | | 5 or more years | |
|---|---|---|---|---|
| | Number | Percent | Number | Percent |
| Total | 20,727 | 100.0 | 40,642 | 100.0 |
| **Age** | | | | |
| Under 35 | 8,164 | 39.4 | 4,111 | 10.1 |
| 35 to 44 | 5,421 | 26.2 | 9,517 | 23.4 |
| 45 to 54 | 4,592 | 22.2 | 12,858 | 31.6 |
| 55 to 64 | 2,185 | 10.5 | 11,316 | 27.8 |
| 65 and over | 216(*) | 1.0(*) | 2,449 | 6.0 |
| Unknown | 147(*) | 0.7(*) | 391(*) | 1.0(*) |
| **Highest educational preparation** | | | | |
| Associate degree | 6,996 | 33.8 | 5,454 | 13.4 |
| Diploma | 7,597 | 36.7 | 29,238 | 71.9 |
| Baccalaureate in nursing | 4,202 | 20.3 | 3,649 | 9.0 |
| Other | 1,780 | 8.6 | 2,114 | 5.2 |
| Unknown | 152(*) | 0.7(*) | 188(*) | 0.5(*) |
| **Marital status** | | | | |
| Married | 13,041 | 62.9 | 29,430 | 72.4 |
| Divorced or separated | 3,886 | 18.8 | 5,156 | 12.7 |
| Widowed | 442(*) | 2.1(*) | 3,153 | 7.8 |
| Never married | 3,193 | 15.4 | 2,804 | 6.9 |
| Unknown | 164(*) | 0.8(*) | 101(*) | 0.2(*) |
| **Children status** | | | | |
| Youngest under 6 | 3,785 | 18.3 | 3,932 | 9.7 |
| All 6 and over | 6,125 | 29.6 | 14,303 | 35.2 |
| No children at home | 10,748 | 51.9 | 22,071 | 54.3 |
| Unknown | 68(*) | 0.3(*) | 335(*) | 0.8(*) |
| **Other employment** | | | | |
| Yes | 3,623 | 17.5 | 2,864 | 7.0 |
| No | 16,986 | 82.0 | 37,694 | 92.7 |
| Unknown | 118(*) | 0.6(*) | 85(*) | 0.2(*) |
| **Number of different types of continuing education courses** | | | | |
| None | 5,454 | 26.3 | 6,918 | 17.0 |
| 1 | 4,474 | 21.6 | 6,837 | 16.8 |
| 2 or 3 | 5,894 | 28.4 | 10,089 | 24.8 |
| 4 or 5 | 2,987 | 14.4 | 7,804 | 19.2 |
| 6 or more | 1,916 | 9.2 | 8,994 | 22.1 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

The divorced or separated nurses comprised the next largest proportion of new RN employees. This percent is significantly different than the proportion of divorced or separated nurses with 5 or more years with a facility. These nurses may have either reentered the workforce as a result of their divorce or separation, may have changed employers, or may have just received their license and obtained their first job.

There were more nurses who had never married among the new employees than among the older employees. This is as expected because the new employees were younger than those who had been employed 5 or more years in a nursing home and had not yet married.

e. Recently Hired RNs by Children Status

Table 40 also shows the children status of the recently hired RNs. Most of the nurses (51.9 percent) had no children living at home. An additional 29.6 percent only had children who were 6 years or older living at home. As might be expected with younger new employees, they had a larger proportion with young children living at home than did the older nurses; however the recent hires had a smaller proportion with only older children at home.

f. Recently Hired RNs by Other Employment

Some of the nurses in the study worked two or more jobs. Their employment at a nursing home may have been their primary or secondary place of employment and the work may have been either full- or part-time. The recently hired nurses were much more likely to have had other employment (17.5 percent) than were nurses that had been retained by a nursing home for 5 or more years (7.0 percent). Apparently, a larger proportion of the recently hired nurses needed the supplemental income than did the nurses with 5 or more years' experience.

g. Recently Hired RNs by Number of Different Types of Continuing Education Courses Taken

The respondents were asked to indicate the different types of geriatric related continuing education courses they had taken during the previous year. From Table 40, it can be seen that the nurses employed in a facility for 5 or more years tended to take more different types of geriatric related continuing education courses than did nurses who were hired within the previous year. This is as expected in that a nurse who had been employed for less than 1 year by a nursing home may have worked much less than 1 year with their present employer. This limited the amount of time they had to take continuing education (CE) courses with that employer. Genatric related CE education courses taken while employed elsewhere would be applicable if they were taken within the year prior to the survey. Recently hired nurses who were previously students, not employed, on employed in a nonnursing home setting may not have had an opportunity or desire to take geriatric nursing courses.

### 4. Importance of Various Factors to Recruitment

#### a. General Assessment

The RNs included in the NNHS were asked to indicate the importance of 45 factors related to the recruitment of RNs. These are the same factors that were discussed earlier in conjunction with the retention of RNs in nursing homes. The results are shown in Table 41. The 10 factors that had the highest percentage of nurses marking the "all important" category are:

- Provision of a comprehensive orientation program for those newly hired (47.0 percent)
- Insurance plans at no cost, or partially paid for, covering hospitalization (45.1 percent)
- Insurance plans at no cost, or partially paid for, covering medical/surgical care (44.0 percent)
- Well-equipped facility with functional nursing units (41.4 percent)
- Pay differential for holiday work (35.3 percent)
- Insurance plans at no cost, or partially paid for, covering dental (33.7 percent)
- Graduated vacation plan varying according to length-of-service (29.7 percent)
- Graduated salary plan with increases according to merit (29.4 percent)
- Retirement plan (other than Federal social security) partially or totally paid for by employer (29.4 percent)
- Provision of in-service education (29.3 percent).

With two exceptions, these 10 highest-rated factors were the same (although the order changed) for the combination of the "all" and "very" important categories. The factors concerning dental insurance and

Table 41. Importance of employment situation factors to recruitment of RNs in nursing homes.

| Recruitment factors | Not important | | Slightly important | | Some importance | | Very important | | All important | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Importance of selected factors to recruitment** | | | | | | | | | | | |
| | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. |
| 1. Clinical supervision available: | | | | | | | | | | | | |
| a. By a master's prepared clinical specialist.......... | 33.1 | 1.1 | 23.9 | 1.1 | 22.4 | 1.1 | 12.0 | 0.9 | 2.3 | 0.4 | 6.2 | 0.6 |
| b. By experienced nursing home nurses....................... | 3.4 | 0.4 | 10.0 | 0.7 | 17.5 | 0.9 | 48.0 | 1.2 | 16.7 | 0.9 | 4.5 | 0.5 |
| 2. Career counseling............... | 25.5 | 1.0 | 28.9 | 1.1 | 23.4 | 1.0 | 15.4 | 1.0 | 2.4 | 0.4 | 4.5 | 0.5 |
| 3. Job advancement possibility along clinical lines............ | 5.3 | 0.6 | 12.1 | 0.8 | 24.5 | 1.0 | 43.1 | 1.2 | 11.2 | 0.8 | 3.8 | 0.5 |
| 4. Job advancement possibility along administrative lines..... | 13.3 | 0.9 | 18.7 | 1.0 | 29.1 | 1.1 | 27.1 | 1.1 | 7.9 | 0.7 | 3.8 | 0.5 |
| 5. Ability to arrange work hours to work: | | | | | | | | | | | | |
| a. During child's school hours. | 9.3 | 0.7 | 7.5 | 0.6 | 14.1 | 0.8 | 46.6 | 1.2 | 18.6 | 1.0 | 3.9 | 0.5 |
| b. During child's school term.. | 13.0 | 0.9 | 11.4 | 0.7 | 18.1 | 0.9 | 38.6 | 1.2 | 14.6 | 0.9 | 4.3 | 0.5 |
| c. During weekdays only......... | 10.2 | 0.6 | 13.6 | 0.8 | 24.7 | 1.1 | 33.4 | 1.1 | 13.8 | 0.9 | 4.3 | 0.5 |
| d. During weekends only......... | 18.9 | 0.9 | 16.1 | 0.9 | 27.0 | 1.2 | 25.5 | 1.0 | 7.8 | 0.7 | 4.7 | 0.5 |
| e. Rotating shifts.............. | 28.4 | 1.2 | 12.5 | 0.8 | 17.3 | 1.1 | 24.4 | 1.0 | 12.4 | 0.8 | 5.0 | 0.5 |
| f. Day shift only............... | 6.0 | 0.6 | 6.7 | 0.6 | 16.6 | 0.9 | 41.2 | 1.1 | 25.1 | 1.2 | 4.4 | 0.5 |
| g. Evening shift only........... | 14.5 | 0.9 | 9.8 | 0.7 | 24.0 | 1.0 | 32.4 | 1.1 | 14.2 | 0.9 | 5.0 | 0.5 |
| h. Night shift only............. | 17.3 | 0.9 | 10.3 | 0.7 | 21.2 | 1.0 | 31.5 | 1.0 | 14.3 | 0.9 | 5.2 | 0.5 |
| 6. Not required to "float" to unfamiliar units................ | 9.8 | 0.7 | 9.7 | 0.6 | 15.1 | 0.8 | 36.6 | 1.2 | 24.5 | 1.2 | 4.3 | 0.5 |
| 7. Pay differential for: | | | | | | | | | | | | |
| a. Evening shift................ | 7.3 | 0.6 | 6.1 | 0.5 | 14.1 | 0.8 | 43.4 | 1.3 | 25.1 | 1.4 | 4.1 | 0.5 |
| b. Night shift.................. | 6.7 | 0.6 | 5.2 | 0.5 | 12.9 | 0.9 | 42.7 | 1.3 | 28.2 | 1.3 | 4.3 | 0.5 |
| c. Weekend work................. | 8.2 | 0.6 | 6.0 | 0.5 | 16.6 | 0.9 | 39.5 | 1.3 | 25.6 | 1.2 | 4.1 | 0.5 |
| d. Holiday work................. | 4.1 | 0.4 | 4.2 | 0.4 | 11.0 | 0.8 | 41.9 | 1.2 | 35.3 | 1.3 | 3.5 | 0.4 |

(continued)

Table 41. (Continued)

|  | Importance of selected factors to recruitment |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Not important |  | Slightly important |  | Some importance |  | Very important |  | All important |  | Unknown |  |
| Recruitment factors | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. | Percent | S.E. |
| 22. Well-equipped facility with functional nursing units...... | 0.5(*) | 0.1 | 1.9 | 0.3 | 7.2 | 0.6 | 45.5 | 1.2 | 41.4 | 1.2 | 3.4 | 0.4 |
| 23. Security personnel available.. | 10.1 | 0.7 | 12.9 | 0.8 | 27.9 | 1.0 | 28.6 | 1.2 | 16.4 | 1.0 | 4.1 | 0.5 |
| 24. Use of facility as clinical center for nursing students... | 28.0 | 1.2 | 15.5 | 0.8 | 32.1 | 1.2 | 14.9 | 1.0 | 5.5 | 0.6 | 4.0 | 0.5 |
| 25. Opportunity for professional development such as participation in clinical nursing conferences and nursing research projects... | 9.3 | 0.7 | 13.4 | 0.8 | 30.5 | 1.2 | 29.8 | 1.2 | 13.2 | 0.8 | 3.8 | 0.5 |
| 26. Availability of college tuition reimbusement plan............... | 11.5 | 0.7 | 13.5 | 0.8 | 24.3 | 1.1 | 30.2 | 1.1 | 16.3 | 0.9 | 4.2 | 0.5 |
| 27. Release time with pay for continuing education........... | 7.4 | 0.6 | 10.7 | 0.7 | 22.9 | 1.1 | 36.0 | 1.2 | 18.9 | 1.0 | 4.1 | 0.5 |
| 28. Reimbursement for expenses for continuing education............ | 6.1 | 0.6 | 8.4 | 0.6 | 20.1 | 1.0 | 40.1 | 1.3 | 21.4 | 1.1 | 3.9 | 0.5 |
| 29. Provision of in-service education........................ | 2.1 | 0.3 | 5.1 | 0.5 | 16.0 | 0.9 | 44.2 | 1.2 | 29.3 | 1.2 | 3.3 | 0.4 |
| 30. Provision of comprehensive orientation program for those newlyhired ..................... | 0.8 | 0.2 | 2.9 | 0.4 | 7.5 | 0.7 | 38.4 | 1.1 | 47.0 | 1.2 | 3.4 | 0.4 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and the District of Columbia.

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table 41. (Continued)

| Recruitment factors | Not important Percent | Not important S.E. | Slightly important Percent | Slightly important S.E. | Some importance Percent | Some importance S.E. | Very important Percent | Very important S.E. | All important Percent | All important S.E. | Unknown Percent | Unknown S.E. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Importance of selected factors to recruitment | | | | | | | | | | | |
| 8. Pay differential or separate salary scale by educational preparation.................... | 8.9 | 0.5 | 10.7 | 0.7 | 23.3 | 1.0 | 36.9 | 1.2 | 16.3 | 0.9 | 3.9 | 0.5 |
| 9. Graduated salary plan with increases according to: | | | | | | | | | | | | |
| a. Length-of-service.......... | 1.9 | 0.3 | 5.5 | 0.6 | 14.1 | 0.8 | 46.7 | 1.3 | 28.4 | 1.4 | 3.4 | 0.4 |
| b. Merit...................... | 3.1 | 0.4 | 5.1 | 0.5 | 14.2 | 0.9 | 43.9 | 1.2 | 29.4 | 1.4 | 4.3 | 0.5 |
| 10. Graduated vacation plan varying according to length-of-service | 1.7 | 0.3 | 4.0 | 0.4 | 13.8 | 0.8 | 47.1 | 1.4 | 29.7 | 1.4 | 3.8 | 0.5 |
| 11. Leave of absence for maternity | 10.4 | 0.7 | 8.3 | 0.7 | 19.8 | 0.9 | 35.9 | 1.2 | 21.3 | 1.0 | 4.3 | 0.5 |
| 12. Child care facilities......... | 23.7 | 1.0 | 14.9 | 0.9 | 24.1 | 1.0 | 22.3 | 1.0 | 10.2 | 0.8 | 4.8 | 0.5 |
| 13. Free parking.................. | 14.4 | 0.9 | 9.9 | 0.7 | 15.5 | 0.8 | 31.9 | 1.1 | 24.3 | 1.0 | 4.0 | 0.5 |
| 14. Convenient public transportation...................... | 24.6 | 1.1 | 11.9 | 0.7 | 21.1 | 1.0 | 25.2 | 1.1 | 12.7 | 0.9 | 4.6 | 0.5 |
| 15. Meals at no cost or subsidized........................ | 21.2 | 1.0 | 16.6 | 0.9 | 25.6 | 1.1 | 20.3 | 1.0 | 11.9 | 1.0 | 4.4 | 0.5 |
| 16. Subsidized housing............ | 54.5 | 1.3 | 15.0 | 0.9 | 15.2 | 1.0 | 6.6 | 0.6 | 3.4 | 0.5 | 5.4 | 0.5 |
| 17. Laundry of uniforms........... | 56.2 | 1.3 | 14.7 | 0.9 | 13.5 | 0.8 | 5.4 | 0.5 | 4.5 | 0.6 | 5.7 | 0.6 |
| 18. Insurance plns at no cost or partially paid for covering: | | | | | | | | | | | | |
| a. Hospitalization............ | 2.9 | 0.4 | 2.2 | 0.3 | 6.3 | 0.6 | 40.1 | 1.2 | 45.1 | 1.4 | 3.4 | 0.4 |
| b. Medical/surgical care...... | 3.3 | 0.4 | 2.4 | 0.3 | 6.8 | 0.6 | 40.0 | 1.2 | 44.0 | 1.4 | 3.5 | 0.4 |
| c. Dental..................... | 4.8 | 0.5 | 5.6 | 0.5 | 15.1 | 0.8 | 36.9 | 1.2 | 33.7 | 1.4 | 3.9 | 0.5 |
| d. Life....................... | 8.5 | 0.5 | 10.2 | 0.7 | 19.1 | 0.9 | 31.4 | 1.1 | 27.1 | 1.2 | 3.7 | 0.4 |
| 19. Retirement plan (other than Federal social security) partially · · totally paid for by employer................... | 4.0 | 0.5 | 8.8 | 0.7 | 19.3 | 1.0 | 34.7 | 1.1 | 29.4 | 1.1 | 3.8 | 0.4 |
| 20. Availability of physicians.... | 5.3 | 0.6 | 6.8 | 0.6 | 17.8 | 0.9 | 39.7 | 1.3 | 26.6 | 1.0 | 3.9 | 0.5 |
| 21. Availability of support service personnel and nonprofessionals to do nonnursing tasks........ | 2.7 | 0.5 | 6.1 | 0.5 | 19.4 | 1.0 | 41.6 | 1.2 | 26.6 | 1.0 | 3.7 | 0.4 |

(continued)

retirement plan were replaced by "Graduated salary plan with increases according to length-of-service" and "Pay differential for night shift." The percentage of nurses who indicated either "all" or "very" important for the top 10 factors ranged from a low of 70.9 percent to a high of 86.9 percent. These relatively high percentages indicated that there was considerable agreement among the nurses on what was important to recruitment.

The top 10 factors based on the "all important" category were the same for recruitment and retention with 1 exception for each. For retention, but not recruitment, the top 10 included "Graduated salary plan with increases according to length of service," and recruitment, but not retention, included "Provision of in-service education." Both of these factors were in the top 10 when the "all" or "very" important categories were combined. In general, then, the nurses reported the same factors as being important to both retention and recruitment. It should be remembered, however, that the nurses were already employed in nursing homes (although about 30 percent of them had been employed for less than a year); thus, they may be more keenly aware of what was important for retaining a nurse in a nursing home than what was important for recruitment.

Of the 12 items mentioned above, 5 of them were benefit-related, 4 were salary-related, and 3 were related to work conditions. This differs from retention in that there is 1 more salary-related factor ("Pay differential for night shift") and one fewer work condition factor ("Availability of support service personnel and nonprofessionals to do nonnursing tasks"). As with retention, none of these top-rated factors was schedule-related, and only one was professional-growth-related ("Provision of in-service education").

The 10 factors that were rated by the largest percentage of nurses as being "not" important to recruitment were the same as the bottom 10 for retention. The rankings were also very similar. When the "not" and "slightly" important categories were combined, the bottom 10 factors remained unchanged. Only four factors were rated by 50 percent or more of the nurses as being "not" or only "slightly" important to the recruitment of nurses:

- Laundry of uniforms (70.9 percent)
- Subsidized housing (69.5 percent)

- Clinical supervision by a master's's prepared clinical specialist (57.0 percent)
- Career counseling (54.4 percent).

In general, the factors that were important or not important to recruitment are the same as those that were or were not important to retention; thus, much of the discussion associated with the equivalent section on retention also applies to recruitment. One factor that may be particularly important to recruitment that was not explicitly included in the list of factors in the questionnaire is the amount of pay or the amount of pay relative to other nursing employment opportunities. It is expected that such a factor would have been rated as "all" or "very" important by most of the nurses. In assessing the importance of the factors, it should be remembered that not all factors that were important to recruitment were on the list that was included in the questionnaire.

In checking the postulated model against the results of the survey it can be observed that the nurses' perception of the job as shown in the model is important to the recruitment of nurses. The survey indicates that some benefits, working conditions, job characteristics, professional opportunities, and salary-related factors are important to recruitment. How a nurse perceives these factors can influence her or his intentions to seek or accept employment with a specific nursing home. Although the survey results support the postulated model, a different configuration of the model may better depict the importance of some of the factors to the recruitment of nurses.

### b. Importance of Benefits to Recruitment by Nurse Characteristics

How the nurses' rating of factors related to benefits varied by their age and highest educational preparation, and the size and ownership of the nursing home in which they were employed is described in this section. The scaling of the benefit variable as well as the working conditions, salary, schedule, and professional opportunities variables was done the same as for the retention variables and is described under the retention section (see Section IV.B.4.b). Tables associated with this section are included in Appendix J-1.

Depending on how many recruitment factors associated with benefits that the nurse marked as being "all" or "very" important, she or he would be classified as having considered the group of benefit-related factors as being of low, medium, or high importance to her or him (see Appendix H for those factors included in the benefit category). In assessing how the importance of benefits varied by the nurse's characteristics, only the proportion of nurses that rated benefits as of high importance were assessed. For nurses with different characteristics (e.g., those under 35 years of age and those 55 to 64 years old), the proportion of nurses who rated the benefits as being of high importance to recruitment were compared and statistically significant differences were reported. If $p<0.01$ the differences are considered statistically highly significant, and for $p<0.05$ the differences are reported as significantly different. This same approach is used for the salary, working conditions, schedule, and professional opportunities categories.

In reviewing those nurses whose rating resulted in their being in the high importance category, significant differences are found only among nurses in different sizes of nursing homes. In general, the larger the nursing homes, the larger the percentage of nurses who believed that these factors were important to recruitment. Highly significant differences were found between nurses employed in nursing homes with over 200 beds and those nurses in facilities with fewer than 150 beds.

The nurses who considered benefits as important to recruitment did not vary significantly by the nurses' age or highest educational preparation; i.e., the importance of benefits did not vary by age or education.

### c. Importance of Working Conditions to Recruitment by Nurses' Characteristics

This section discusses whether nurses with different characteristics rated the importance of working conditions to recruitment differently (see Appendix J-2 for related tables and Appendix H for the factors included in the working condition category). Highly significant differences existed between the proportion of nurses in small nursing homes who rated working conditions as important and those working in larger nursing homes. In general, the larger the facility, the larger the proportion of nurses who rated working conditions as important to recruitment. For example, 36.7 percent of the nurses working in facilities with 200 or more available beds rated working conditions as important to recruitment in comparison to 22.0 percent for nurses in facilities with 50 or less beds.

The data also indicated a larger proportion of nurses with an advanced degree in nursing or in a nursing-related field were likely to rate working conditions as being of importance to recruitment than did nurses with a diploma. The difference between 29.7 percent for diploma nurse and the 41.3 percent for those nurses with advanced degrees is statistically significant.

A higher proportion of nurses in government nursing homes (37.2 percent) found working conditions to be important to recruitment than did nurses in proprietary homes. This difference is statistically significant.

### d. Importance of Salary to Recruitment by Nurses Characteristics

The salary variable includes factors addressing pay differential for evening and night shift, weekend and holiday work, and educational preparation. It also includes a factor on having a graduated salary plan that increased according to length-of-service and merit. The nurses who rated most of these salary factors as "all" or "very" important were assessed to see if the proportion varied by different nurse characteristics. The tables on which this section is based are included in Appendix J-3.

There are highly significant differences between nurses in small and large nursing homes. An estimated 47.5 percent of the nurses in nursing homes with 50 or fewer beds found the salary variable to be of high importance to recruitment as compared to 67.4 percent of the nurses in facilities with 200 or more beds. In general, a smaller proportion of nurses in facilities with 50 or fewer beds rated salary as important than did the proportion of nurses in any other sized facility.

Statistically significant differences also exist in how nurses rated the importance of salary to recruitment between nurses with diplomas and those with associate degrees. A larger proportion of the nurses with associate degrees (68.0 percent) found salary to be important than did diploma nurses (61.5 percent).

### e. Importance of Professional Opportunities to Recruitment by Nurses' Characteristics

The professional opportunities variable includes educational opportunities as well as opportunities to participate in conferences and research projects (see Appendix H for specific factors and Appendix J-4 for the tables on which this section is based). Highly significant differences in the proportion of nurses that rated professional opportunities as important to recruitment of RNs are found among nurses of different ages and educational preparation, and nurses employed in small and large nursing homes.

The younger the nurse, the larger the proportion that rated professional opportunities as being important to recruitment. An estimated 32.0 percent of the nurses younger than 35 years old indicated that professional opportunities were important to recruitment, and only 22.0 percent of the nurses from 55 to 64 years old so indicated.

The proportion of baccalaureate (36.1 percent) and associate degreed (32.0 percent) nurses rating professional opportunities as being of high importance was higher than the proportion of nurses whose highest educational preparation was a diploma (23.8 percent). This may be an age-related phenomenon because the diploma nurses tended to be older.

A greater proportion of nurses in the larger nursing homes rated professional opportunities as being important to recruitment than did nurses in the smaller homes. An estimated 36.1 percent of nurses in facilities with 200 or more beds rated professional opportunities as being of high importance. The difference between this percentage for the larger homes and the proportion of nurses working in homes with 50 or fewer beds (21.3 percent), 51 to 99 beds (23.7 percent) and 100 to 149 (24.5 percent) who rated professional opportunities as of high importance is highly significant.

### f. Importance of Schedule to Recruitment by Nurses' Characteristics

The schedule variable includes factors concerning a nurse's ability to arrange her or his schedule to work while a child was in school, to work weekends or weekdays, or on various shifts. The specific factors included in the schedule variable are given in Appendix H. The tables on which this section is based are included in Appendix J-5.

The general proportion of nurses who considered the schedule as being important to recruitment does not vary much by any of the nurses' characteristics. The data indicates significant differences between two age groups (less than 35 and 45 to 54 years of age).

### g. Summary of the Importance of Recruitment Factors

The factors that the RNs employed in nursing homes found important to recruitment are those associated with the working conditions and rewards (salary or benefits). The working condition factors of high importance are the provision of a comprehensive orientation program and a well-equipped facility with functional nursing units. Insurance coverage (hospital, medical/surgical and dental) rates high among the benefits as does graduated vacation plans and retirement plans. Pay differentials for holiday work and graduated salary plan with increases according to merit are also rated as being of high importance to recruitment of nurses into nursing homes.

Nurses of different ages rated the importance of professional opportunities and schedule to the recruitment of RNs differently. A larger proportion of the younger nurses than older nurses rated professional opportunities as being important to recruitment. As related to schedule, the data suggest that a larger proportion of nurses in the 45 to 54 age range consider the schedule important to recruitment than did older or younger nurses.

Nurses with different highest educational preparation rated the importance of working conditions, salary, and professional opportunities to the retention of nurses differently. The differences were always between diploma nurses and nurses with different highest preparations, with a smaller proportion of diploma nurses rating a variable as being of high importance than the other nurses.

For working conditions, a smaller proportion of diploma nurses rated it as important than did nurses with advanced degrees or a baccalaureate in a nursing-related field. A smaller proportion of diploma nurses rated salary and professional opportunities as being important to recruitment than did RNs with associate degrees as their highest educational preparation. In addition, a smaller proportion of diploma nurses than baccalaureate nurses rated professional opportunities as important to recruitment.

Nurses who were employed in facilities with different types of ownership rated only the importance of working conditions differently. A larger proportion of RNs in government-owned facilities rated working conditions as important to recruitment than did nurses working in proprietary facilities.

Nurses employed in different-sized facilities rated the importance of benefits, working conditions, salary, and professional opportunities to recruitment differently. A larger proportion of nurses in the larger facilities found the variables more important to recruitment than did those nurses employed in small nursing homes.

### 5. Recruitment Multivariate Analyses

Linear regression models were fit to data from the 1985 National Nursing Home Survey to determine which demographic, job characteristics, structural conditions, and other characteristics were related to the recruitment of nurses. These models were fit to predict the proportion of RNs who had worked at the same facility for less than one year.

The same variables and variable selection procedures used for the retention multivariate analysis (Section IV.B.5) were used for the recruitment modelling. Models were first fit considering separately the demographic characteristics, job characteristics, structural conditions, and other variables that are presented in Tables 29, 30, 31, and 32. The same sequences of models run for the retention analysis were used to select the variables to be in the final model for each of the four types of characteristics. Age and years worked were included in the models to remove the effect of age and experience. Any variable which was significant at the 5 percent level was included in the final model for that characteristic. A combined model which included all the variables in the four final models was also fit.

All of the demographic variables except marital status were significant in at least one of the sequence of demographic models. Of the job characteristics, shift, position type, and the work activities giving personal care and attending staff education were related to the proportion having worked at the same facility less than one year. The structural conditions, type of ownership and full-time equivalents per 1,000 inpatient days for administrators, RNs, LPN/LVNs, pharmacists, occupational therapists, radiological, and food service personnel, and deaths per discharge were statistically significantly correlated with recruitment. Weekly salary was also statistically significant.

Table 42 presents the final combined and four separate models for recruitment. The RN's age and years worked were included in all of the models to remove the effect of age and experience in being recruited to the

**Table 42.** Effect of demographic, job, structural, and other characteristics on the proportion of RNs working in the same facility less than 1 Year

| | Combined | | Demographic | | Job char. | | Structural | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value | Coeff. | P-value |
| Multiple correlation (R)...... | 17.02 | 0.0000 | 11.20 | 0.0000 | 7.71 | 0.0000 | 10.88 | 0.0000 | 7.50 | 0.0000 |
| Demographic characteristics | | | | | | | | | | |
| Age........................ | -0.009 | 0.0000 | -0.008 | 0.0000 | -0.007 | 0.0000 | -0.007 | 0.0000 | -0.007 | 0.0000 |
| Years worked.............. | -0.001 | 0.4019 | -9.2e-04 | 0.4848 | -0.002 | 0.0532 | -0.003 | 0.0165 | -0.003 | 0.0344 |
| Race | | | | | | | | | | |
| White.................... | * | | * | | | | | | | |
| Black.................... | 0.154 | 0.0105 | 0.101 | 0.0875 | | | | | | |
| Other.................... | -0.037 | 0.3882 | -0.083 | 0.0216 | | | | | | |
| Marital status | | | | | | | | | | |
| Married.................. | -0.008 | 0.8995 | -0.007 | 0.8753 | | | | | | |
| Divorced/separated...... | 0.050 | 0.4225 | 0.040 | 0.4002 | | | | | | |
| Widowed.................. | -0.017 | 0.7902 | -0.019 | 0.6872 | | | | | | |
| Never married........... | * | | * | | | | | | | |
| Children | | | | | | | | | | |
| One or more < 6 years... | -0.073 | 0.0714 | -0.092 | 0.0184 | | | | | | |
| All 6 years or more..... | -0.072 | 0.0085 | -0.075 | 0.0041 | | | | | | |
| None..................... | * | | * | | | | | | | |
| Education level | | | | | | | | | | |
| Associate degree........ | 0.058 | 0.0989 | 0.094 | 0.0007 | | | | | | |
| Diploma.................. | * | | * | | | | | | | |
| B.S. in nursing......... | 0.082 | 0.0294 | 0.125 | 0.0023 | | | | | | |
| M.S. in nursing......... | 0.061 | 0.5597 | 0.034 | 0.7082 | | | | | | |
| Other degree | 0.120 | 0.0137 | 0.107 | 0.0185 | | | | | | |
| Continuing edu. indi. .... | -0.075 | 0.0089 | -0.088 | 0.0018 | | | | | | |
| Other employment.......... | 0.044 | 0.2383 | 0.064 | 0.1130 | | | | | | |
| Job characteristics | | | | | | | | | | |
| Shift | | | | | | | | | | |
| Rotate................... | -0.010 | 0.7712 | | | 0.030 | 0.3942 | | | | |
| Days..................... | * | | | | * | | | | | |
| Evenings................. | -0.012 | 0.6980 | | | 0.025 | 0.3880 | | | | |
| Nights................... | 0.042 | 0.1613 | | | 0.065 | 0.0448 | | | | |
| Position type | | | | | | | | | | |
| General nursing......... | * | | | | * | | | | | |
| Specialist............... | -0.098 | 0.0532 | | | -0.044 | 0.3959 | | | | |
| Supervisor............... | -0.057 | 0.0143 | | | -0.047 | 0.0344 | | | | |
| Other.................... | -0.282 | 0.0000 | | | -0.202 | 0.0001 | | | | |
| Work activity | | | | | | | | | | |
| Giving personal care.... | -0.083 | 0.0006 | | | -0.075 | 0.0011 | | | | |
| Attending staff edu. ... | -0.033 | 0.1164 | | | -0.049 | 0.0928 | | | | |
| Structural conditions | | | | | | | | | | |
| Ownership | | | | | | | | | | |
| Proprietary............. | * | | | | | | * | | | |
| Nonprofit............... | 0.045 | 0.0822 | | | | | 0.023 | 0.3179 | | |
| Government.............. | -0.039 | 0.2455 | | | | | -0.077 | 0.0068 | | |
| FTE's per 1000 inpat. days | | | | | | | | | | |
| Administrator........... | -0.320 | 0.2967 | | | | | -0.356 | 0.3250 | | |
| RN....................... | -0.164 | 0.0012 | | | | | -0.194 | 0.0001 | | |
| LPN/LVN.................. | 0.216 | 0.0000 | | | | | 0.200 | 0.0000 | | |
| Pharmacist............... | -1.879 | 0.0084 | | | | | -0.839 | 0.5017 | | |
| Occupational therapist.. | -0.879 | 0.0899 | | | | | -1.107 | 0.0047 | | |
| Radiological............ | 4.760 | 0.0084 | | | | | 4.525 | 0.0161 | | |
| Food service............ | 0.062 | 0.0165 | | | | | 0.075 | 0.0002 | | |
| Deaths/discharge........ | -0.004 | 0.0001 | | | | | -0.004 | 0.0000 | | |
| Other variables | | | | | | | | | | |
| Weekly salary............. | -2.4e-4 | 0.0062 | | | | | | | -3.8e-4 | 0.0000 |
| Fulltime indicator........ | 0.065 | 0.0242 | | | 0.041 | 0.0841 | | | 0.099 | 0.0035 |

*Reference cell

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and the District of Columbia.

current facility. Age of the RN was consistently negatively correlated with recruitment. Years worked was also generally negatively related to the proportion of RNs working at the facility less than one year.

Among the demographic variables, the education and training effects were most important. All of the education levels, except for an M.S. in nursing, were associated with an increased proportion of RNs having been at the facility less than one year when compared with a diploma-trained RNs. Continuing education was associated with a lower proportion of RNs having been at the facility less than one year. These effects were the opposite of those observed for retention.

Of the job characteristics, the work activity giving personal care was statistically negatively related to recruitment. Nurses in positions of specialist, supervisor, and other were less likely to have been at the facility less than one year when compared to those in general nursing.

Under structural conditions, the number of full-time equivalents per 1,000 inpatient days for RNs had a negative effect, while radiologists and food service staff there was a positive effect. There was also a negative trend with deaths per discharge. Finally, a negative effect was noted for weekly salary.

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# Appendix A

# Questionnaires

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# Appendix A-1

## 1985 National Nursing Home Survey Questionnaires

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DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
National Center for Health Statistics
1985 National Nursing Home Survey

OMB # 0937-0115
APPROVAL EXPIRES 12/31/86

# FACILITY QUESTIONNAIRE

## Confidential Information

Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with Section 308(d) of the Public Health Service Act (42 USC 242m).

**A.** Telephone Number (_____) _______-_______
Area Code Number

**B.** Interviewer Name ____________________

**C.** Interviewer ID ____________________

**D.** Date of Interview ____/____/____
Mo. Day Year

**E.** Respondent Name ____________________

**INTERVIEWER NOTE: PLEASE READ THE FACILITY QUESTIONNAIRE PROMPT CARD #2 BEFORE YOU BEGIN THE INTERVIEW.**

1. Are any personal or nursing services routinely provided to residents in addition to room and board?

01 ☐ Yes (SKIP TO Q.2)     02 ☐ No (GO TO INTERVIEWER NOTE BELOW.)

INTERVIEWER NOTE: THIS FACILITY IS OUT-OF-SCOPE FOR THE SURVEY. PLEASE TERMINATE THE INTERVIEW BY SAYING TO THE RESPONDENT:

"It would appear that your facility was incorrectly selected for inclusion in this survey. At this time, I will terminate this interview. I will report the situation to my immediate supervisor who will call you in a few days to verify this information."

PHS-6248-2
01/85

**SHOW FLASHCARD # 1**

2a. What is the type of ownership of this facility?

01 ☐ Individual
02 ☐ Partnership
03 ☐ Corporation
04 ☐ Church related
05 ☐ Nonprofit corporation
06 ☐ Other nonprofit ownership
07 ☐ State
08 ☐ County
09 ☐ City
10 ☐ City-County
11 ☐ Hospital District
12 ☐ U.S. Public Health Service
13 ☐ Armed Forces
14 ☐ Veterans Administration
15 ☐ Other Federal Agency
(PLEASE SPECIFY) ____________________

2b. Is this facility owned or operated by a hospital?

01 ☐ Yes    02 ☐ No

**INTERVIEWER NOTE: ASK Q. 2c - d ONLY IF Q.2a HAS CODES 01-06 MARKED. OTHERWISE SKIP TO Q.3.**

2c. Is this facility a member of a group of facilities operating under one general authority or general ownership?

01 ☐ Yes    02 ☐ No (SKIP TO Q. 3)

2d. How many facilities belong to this organization? ____________________

3. How many beds in this facility are *licensed* by the health department or other responsible agency?

Total licensed beds ______________________

4. How many beds are currently available for residents?

Include all beds set up and staffed for use whether or not they are in use by residents at the present time. Do *not* include beds used by staff or owners or beds used exclusively for emergency purposes, solely day care, or solely night care.

Total available beds ______________________

5a. Was there a change in the *total number of beds* (REFER TO Q.4) regularly maintained during calendar year 1984?

01 ☐ Yes    02 ☐ No (SKIP TO Q.6)

5b. In which months was the number of beds changed? (ENTER MONTHS BELOW)

5c. (ASK FOR EACH CHANGE:) In (MONTH), was that an increase or decrease?

5d. (ASK FOR EACH CHANGE:) How many beds?

|  | 5b. Month | 5c. (CHECK ONE) Increase or Decrease | 5d. Number of Beds |
|---|---|---|---|
| (1) | __________ | 01 ☐ or 02 ☐ | ____________________________ |
| (2) | __________ | 01 ☐ or 02 ☐ | ____________________________ |
| (3) | __________ | 01 ☐ or 02 ☐ | ____________________________ |

6. Is this facility certified by both Medicare and Medicaid, Medicare only, Medicaid only, or neither?

01 ☐ Both Medicare and Medicaid
02 ☐ Medicare only
03 ☐ Medicaid only (SKIP TO Q.8)
04 ☐ Neither (SKIP TO Q.13)

7a. How many beds are certified under *Medicare*?

Medicare beds ____________________

7b. What is the per diem rate that you receive from *Medicare* for routine services?

$_______._______ per diem

---

**INTERVIEWER NOTE: SKIP TO Q.12 IF "MEDICARE ONLY" IN Q.6**

---

8. Is this facility certified as an SNF, that is, a skilled nursing facility, by the *Medicaid* Program?

01 ☐ Yes 02 ☐ No (SKIP TO Q.10)

---

9a. How many beds are certified under *Medicaid* as SNF beds?

Medicaid SNF beds ____________________

9b. What is the per diem rate that you receive from *Medicaid* for routine services for skilled nursing patients?

$_______._______ per diem

---

10. Is this facility certified as an ICF, that is, an intermediate care facility by the *Medicaid* Program?

01 ☐ Yes 02 ☐ No (SKIP TO Q.12)

---

11a. How many beds are certified under *Medicaid* as ICF beds?

Medicaid ICF beds ____________________

11b. What is the per diem rate that you receive from *Medicaid* for routine services for intermediate care patients?

$_______._______ per diem

---

12a. Do you have any beds that are *not certified* by either Medicaid or Medicare?

01 ☐ Yes 02 ☐ No (SKIP TO Q.13)

12b. How many of these beds does your facility have?

Non-certified beds ____________________

13. How many admissions were there to this facility during calendar year 1984?

Admissions in 1984 ____________________ ☐ None

---

14a. How many discharges were there from this facility during calendar year 1984?

Discharges in 1984 ____________________ ☐ None

14b. How many persons died during calendar year 1984 while residents or patients of this facility?

Deaths in 1984 ____________________ ☐ None

---

15. For calendar year 1984, what were the total inpatient days of care provided. That is, what was the sum of the daily patient census count *by type of certification?* Do not include cases that were day care only.

(1) SNF-Medicare ____________________ days ☐ not applicable

(2) SNF-Medicaid ____________________ days ☐ not applicable

(3) ICF-Medicaid ____________________ days ☐ not applicable

(4) All other days ____________________ days ☐ not applicable

(5) Total Days: ____________________ days

**INTERVIEWER:** THE 'TOTAL DAYS' FIGURE SHOULD EQUAL THE SUM OF ALL FIGURES ABOVE IT. FOR ANY CATEGORY WHICH IS NOT APPLICABLE, REMEMBER TO MARK THE BOX.

**SHOW FLASHCARD # 2**

16. Are any of the following services offered to residents of this facility?

| | | |
|---|---|---|
| a. MEDICAL SERVICES - evaluation and/or treatment from a licensed M.D. (not including psychiatrist), D.O., or physician associate. | 01 ☐ Yes | 02 ☐ No |
| b. OTHER MEDICAL SERVICES - from licensed professional, e.g., dentist, podiatrist; treatment of physical illness. | 01 ☐ Yes | 02 ☐ No |
| c. NURSING SERVICES - coordination by an R.N. or an L.P.N. of a care plan; e.g. catheterization, injection. | 01 ☐ Yes | 02 ☐ No |
| d. MENTAL HEALTH SERVICES - from psychiatrist, psychologist, psychiatric social worker or other trained mental health worker. | 01 ☐ Yes | 02 ☐ No |
| e. PHYSICAL THERAPY - from a certified or licensed physical therapist· treatment to restore function, relieve pain. | 01 ☐ Yes | 02 ☐ No |
| f. SPEECH OR HEARING THERAPY - from a certified/licensed speech, language pathologist/audiologist; evaluation/treatment. | 01 ☐ Yes | 02 ☐ No |
| g. OCCUPATIONAL THERAPY - from a registered or licensed occupational therapist; special restorative treatment. | 01 ☐ Yes | 02 ☐ No |
| h. SPECIAL EDUCATION - from qualified teachers; specially designed pre-school, elementary, or secondary instruction. | 01 ☐ Yes | 02 ☐ No |
| i. PERSONAL CARE - aid in bathing, dressing, using the toilet, getting in or out of bed, eating, or walking. | 01 ☐ Yes | 02 ☐ No |
| j. SOCIAL SERVICES - counseling, advocacy coordination, information, referrals; e.g., legal aid, job, housing assistance. | 01 ☐ Yes | 02 ☐ No |
| k. NUTRITION SERVICES - direct counseling by a trained nutritionist; does not include supervision of special diets. | 01 ☐ Yes | 02 ☐ No |
| l. HOSPICE SERVICES - counseling for terminally ill clients and their families. | 01 ☐ Yes | 02 ☐ No |
| m. SHELTERED EMPLOYMENT - provision of employment in a special industry, work station or workshop. | 01 ☐ Yes | 02 ☐ No |
| n. VOCATIONAL REHABILITATION - evaluation, training, or counseling aimed at assisting a person to enter/reenter labor force. | 01 ☐ Yes | 02 ☐ No |
| o. TRANSPORTATION - provision of transportation and/or escort services. | 01 ☐ Yes | 02 ☐ No |
| p. PRESCRIBED MEDICINES OR NONPRESCRIBED MEDICINES | 01 ☐ Yes | 02 ☐ No |
| q. EQUIPMENT OR DEVICES | 01 ☐ Yes | 02 ☐ No |
| r. OTHER (SPECIFY) ____________________ ____________________ | 01 ☐ Yes | 02 ☐ No |

17. Does this facility provide any services to persons who are *not* residents of the facility?

01 ☐ Yes　　02 ☐ No (SKIP TO Q.20)

**SHOW FLASHCARD # 3**

18. Which of the following services do you provide to non-residents? (MARK (x) ALL THAT APPLY.)

01 ☐ Day care (services provided during the day to persons who do not sleep in the facility overnight)

02 ☐ Physical therapy

03 ☐ Home health care services

04 ☐ Social services

05 ☐ Other, (SPECIFY) ______________________

19. How many non-residents received any of these services during calendar year 1984?

Number of non-residents ______________

**SHOW FLASHCARD # 4**

20. What type of physician services are available in this facility?

01 ☐ Physician(s) on the premises at all times

02 ☐ Physician(s) on the premises during the daytime hours every weekday, and on-call on weekends and at other times

03 ☐ Physician(s) on premises at scheduled times no less than once per month and on-call remainder of time

04 ☐ Physician available on-call only

05 ☐ Other,.(SPECIFY) ______________________

21a. How many total full-time and part-time employees work in this facility? (Full-time is 35 hours or more per week).

Total full-time employees ____________________

Total part-time employees ____________________

**SHOW FLASHCARD # 5**

21b. How many full-time and part-time employees work in this facility for each type of employee?

21c. What was the total number of hours worked by (type of part-time employee) in this facility during the last seven days, that is, from last (day) the (date), through yesterday?

(ENTER NUMBER OF FULL-TIME AND PART-TIME EMPLOYEES IN 21b., THEN ASK 21c. FOR EACH TYPE OF PART-TIME EMPLOYEE)

| | 21b. | | 21c. Number of hours worked (over the last 7 days by all part-time employees) |
|---|---|---|---|
| | Full-time | Part-time | |
| (1) Administrator/Asst. Administrator | | | |
| (2) Registered Nurses (R.N.) | | | |
| (3) Licensed Practical Nurses (L.P.N.) or Licensed Vocational Nurses (L.V.N.) | | | |
| (4) Nurses Aides/Orderlies | | | |
| (5) Physicians (M.D. or D.O.), Residents and Interns | | | |
| (6) Dentists | | | |
| (7) Pharmacists | | | |
| (8) Registered Occupational Therapists | | | |
| (9) Registered Physical Therapists | | | |
| (10) Speech Pathologists and/or Audiologists | | | |
| (11) Activities Director | | | |
| (12) Dieticians or Nutritionists | | | |
| (13) Registered Medical Records Administrators | | | |
| (14) Social Workers | | | |
| (15) Radiological Service Personnel | | | |
| (16) All other health professional and technical personnel | | | |
| (17) Office Staff | | | |
| (18) Food Service Personnel | | | |
| (19) Housekeeping/Maintenance Personnel | | | |
| (20) All other non-health personnel | | | |

22a. What is the total number of hours worked by registered nurses who worked last week?

Total hours worked ____________________

22b. What is the total number of hours worked by licensed practical or vocational nurses who worked last week?

Total hours worked ____________________

22c. What is the total number of hours worked by nurses aides or orderlies who worked last week?

Total hours worked ____________________

---

23. Do any persons serve on a voluntary basis (i.e., unremunerated) in your facility, either full or part-time?

01 ☐ Yes 02 ☐ No

---

24. What is the basic charge for private pay patients at each level of care?

| | | | Day or Month | | |
|---|---|---|---|---|---|
| a. skilled | $______.____ | per | 01 ☐ | 02 ☐ | ☐ not applicable |
| b. intermediate | $______.____ | per | 01 ☐ | 02 ☐ | ☐ not applicable |
| c. residential | $______.____ | per | 01 ☐ | 02 ☐ | ☐ not applicable |

---

Thank you for your time and cooperation.

**INTERVIEWER NOTE: AFTER COMPLETING THE ABOVE ITEMS AND THANKING THE RESPONDENT, CONTINUE THE INTERVIEWING PROCESS WITH PROMPT CARD #3.**

☆U.S. GOVERNMENT PRINTING OFFICE: 1985 461 357 20394

# NURSING STAFF QUESTIONNAIRE

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DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
National Center for Health Statistics
1984 National Nursing Home Survey
PRETEST

OMB No. 0937-0115
APPROVAL EXPIRES: 12/31/84

CONTROL NO. ☐☐☐☐☐☐

# NURSING STAFF QUESTIONNAIRE

A. LINE NO. ☐☐☐☐

B. ______________________________
(Occupational Title)

## CONFIDENTIAL INFORMATION

Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with Section 308 of the Public Health Service Act (42 USC 242k).

---

## PLEASE READ THIS BEFORE YOU BEGIN TO ANSWER THE QUESTIONNAIRE

The letter accompanying this questionnaire explains the purposes of the survey, the uses of the information, and the confidentiality of the data. Please read this letter carefully before completing the questionnaire.

If you have any questions regarding items on the questionnaire or how you should complete it, please call COLLECT _____ - _______________________ and a National Nursing Home Survey employee will be available to help you.

Your cooperation in carefully completing the questionnaire is greatly appreciated. It should take only a few minutes of your time and the information that you provide is very important. As stressed in the letter, these data are held in strictest confidence. When you have completed the questionnaire, please seal it in the postage-paid envelope provided. You may return it to the interviewer if he/she is still in the facility or drop it in the mail in the enclosed envelope.

PHS-6248-1
07/83

## QUESTIONNAIRE FOR REGISTERED NURSES IN NURSING HOMES

### A. EMPLOYMENT STATUS

1. Are you a member of the staff of this facility or employed to work in this facility under some other arrangement?

☐ Staff member (go to question 3)
☐ Employed under special contract arrangement
☐ Working in facility through supplementary (temporary) employment service

} *Go to Question 2*

**For those who are not staff members of facility**

2. a. How many hours do you usually work in a normal work week?

☐☐

b. How many hours did you work in this facility during this past week?

☐☐

*Go to Section C*

**For those who are staff members of the facility**

3. a. How many hours are you scheduled to work in this facility per week on the average?

☐☐

b. Is this considered full-time employment in your facility?

☐ Yes ☐ No

4. Do you rotate shifts during your work schedule?

☐ Yes ☐ No

*If "No"*, indicate the principle shift you work:

☐ Day
☐ Evening
☐ Night

5. What type of work schedule do you have?

☐ Week days only
☐ Weekends only
☐ Work both week days and weekend

6. Of the following types of position which one is the best description of the one you hold in the facility?

☐ Staff nurse
☐ Head or assistant head nurse
☐ Clinical nursing specialist
☐ Nurse practitioner
☐ Supervisor or assistant
☐ Director of nursing
☐ Administrator
☐ Other (*specify* ______________________)

7. What is your average weekly salary (before deductions) in this facility?

$ ☐☐☐.☐☐

8. How many years have you been working in this facility?

- ☐ Less than one year
- ☐ 1 up to 2 years
- ☐ 2 up to 3 years
- ☐ 3 up to 5 years
- ☐ 5 years or more

9. Just prior to being employed in this facility were you:

- ☐ Employed in a health care facility of the following type:
  - ☐ Another nursing home
  - ☐ Hospital
  - ☐ Public/community health agency
  - ☐ Physician's office
  - ☐ Other (*specify* ____________________)
- ☐ Not employed in nursing for the following length of time:
  - ☐ This facility is first nursing job
  - ☐ Less than one year
  - ☐ 1 up to 3 years
  - ☐ 3 up to 5 years
  - ☐ 5 up to 10 years
  - ☐ 10 years or more

10. In addition to the hours you work in this facility, do you usually work any additional hours as a Registered Nurse in any other settings?

☐ Yes ☐ No

*If* "Yes", *how many hours per week?* ☐☐

What type of facility?

- ☐ Hospital
- ☐ Nursing home
- ☐ Other (*specify* ____________________)

## B. EMPLOYMENT ROLE

11. The following specific activities occur with a considerable degree of frequency in the type of facility in which you are employed. *Indicate the degree to which you are involved in each of the following activities during a usual work week.*

| | ALWAYS | VERY OFTEN | ABOUT AS OFTEN AS NOT | SELDOM | NEVER |
|---|---|---|---|---|---|
| Administering routine therapies (e.g. medications, dressings, decubitus care, bowel and bladder re-training) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Administering complex therapies (e.g. intravenous and gastric feedings, oxygen, suction, removal of fecal impactions, etc.) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Giving personal care (bathing, toileting, dressing, feeding, and other activities of daily living) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Observing and recording (e.g. changes in physical, mental and emotional status of patients; charting patient condition, etc.) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Teaching and counseling patients (e.g. activities of daily living, treatments, ostomy care, foot care) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Determining individual patient care plans (e.g. assessing patient status, planning care, communicating to staff) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Evaluating and modifying patient care plans | ☐ | ☐ | ☐ | ☐ | ☐ |
| Assigning and supervising nursing personnel giving care | ☐ | ☐ | ☐ | ☐ | ☐ |
| Planning and providing diversion/recreation programs | ☐ | ☐ | ☐ | ☐ | ☐ |

12. The following specific activities may occur somewhat less frequently in the facility in which you are employed. *Indicate the degree to which you are involved in each of the following activities when they occur:*

| | ALWAYS | VERY OFTEN | ABOUT AS OFTEN AS NOT | SELDOM | NEVER | DO NOT OCCUR |
|---|---|---|---|---|---|---|
| Planning and/or participating in research | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Conducting staff education | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Attending staff education activities | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Participating in or conducting educational experiences for nursing or other health professional students | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

13. When decisions are made in the following areas, to what extent do you participate?

| | ALWAYS | VERY OFTEN | ABOUT AS OFTEN AS NOT | SELDOM | NEVER |
|---|---|---|---|---|---|
| Determining institutional policy (e.g., Types of professional services needed to provide care to residents, patient groupings, protection of residents' personal/property rights, etc.) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Determining patient care policy (e.g., nursing care standards, staffing mix and ratios, equipment and supplies, etc.) | ☐ | ☐ | ☐ | ☐ | ☐ |
| Determining personnel policy (e.g., salary schedules, job benefits, staffing schedules, etc.) | ☐ | ☐ | ☐ | ☐ | ☐ |

## C. EMPLOYMENT CONDITIONS

14. A wide variety of factors about the employment situation could be important in attracting a Registered Nurse to a position and/or in making an individual want to stay in the position. Using the following scale indicating DEGREE OF IMPORTANCE, rate each of the following items according to its importance in (a) Recruiting and/or (b) Retaining registered nurses employed in nursing homes:

| NOT IMPORTANT | SLIGHTLY IMPORTANT | ABOUT AS IMPORTANT AS NOT | VERY IMPORTANT | ALL IMPORTANT |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

**EXAMPLE:**

| | Recruitment | Retention |
|---|---|---|
| Retirement Plan | 2 | 3 |

The "2" rating under "Recruitment" indicates that you believe retirement plans have slight importance in recruiting a registered nurse. The "3" rating under "Retention" indicates that you believe as many RNs would consider retirement plans as an influence in staying as the number of RNs who would not consider retirement plans a reason for staying.

| | Recruitment | Retention |
|---|---|---|
| Clinical Supervision available: | | |
| by a master's prepared clinical specialist | ☐ | ☐ |
| by experienced nursing home nurses | ☐ | ☐ |
| Career counseling | ☐ | ☐ |
| Job advancement possibility along clinical lines | ☐ | ☐ |
| Job advancement possibility along administrative lines | ☐ | ☐ |
| Ability to arrange work hours to work: | | |
| During child's school hours | ☐ | ☐ |
| During child's school term | ☐ | ☐ |
| During week days only | ☐ | ☐ |
| During weekends only | ☐ | ☐ |
| Rotating shifts | ☐ | ☐ |
| Day shift only | ☐ | ☐ |
| Evening shift only | ☐ | ☐ |
| Night shift only | ☐ | ☐ |
| Not required to "float" to unfamiliar units | ☐ | ☐ |
| Pay differential for: | | |
| Evening shift | ☐ | ☐ |
| Night shift | ☐ | ☐ |
| Weekend work | ☐ | ☐ |
| Holiday work | ☐ | ☐ |

**14. (Continued)**

| | Recruitment | Retention |
|---|---|---|
| Pay differential or separate salary scale by educational preparation | ☐ | ☐ |
| Graduated salary plan with increases according to: | | |
| length-of-service | ☐ | ☐ |
| merit | ☐ | ☐ |
| Graduated vacation plan varying according to length-of-service | ☐ | ☐ |
| Leave of absence for maternity | ☐ | ☐ |
| Child care facilities | ☐ | ☐ |
| Free parking | ☐ | ☐ |
| Convenient public transportation | ☐ | ☐ |
| Meals at no cost or subsidized | ☐ | ☐ |
| Subsidized housing | ☐ | ☐ |
| Laundry of uniforms | ☐ | ☐ |
| Insurance plans at no cost or partially paid for covering: | | |
| Hospitalization | ☐ | ☐ |
| Medical/surgical care | ☐ | ☐ |
| Dental | ☐ | ☐ |
| Life | ☐ | ☐ |
| Retirement plan (other than Federal social security) partially or totally paid for by employer | ☐ | ☐ |
| Availability of physicians | ☐ | ☐ |
| Availability of support service personnel and non-professionals to do non-nursing tasks | ☐ | ☐ |
| Well-equipped facility with functional nursing units | ☐ | ☐ |
| Security personnel available | ☐ | ☐ |
| Use of facility as clinical center for nursing students | ☐ | ☐ |
| Opportunity for professional development such as participation in clinical nursing conferences and nursing research projects | ☐ | ☐ |
| Availability of college tuition reimbursement plan | ☐ | ☐ |
| Release time with pay for continuing education | ☐ | ☐ |
| Reimbursement for expenses for continuing education | ☐ | ☐ |
| Provision of in-service education | ☐ | ☐ |
| Provision of comprehensive orientation program for those newly-hired | ☐ | ☐ |

## D. GENERAL INFORMATION

To assist in our statistical interpretation of your responses we ask that you provide us with the following background information about yourself.

15. Year of birth

1 9 ☐ ☐

16. Sex

- ☐ Female
- ☐ Male

17. a. Racial background

- ☐ American Indian or Alaskan Native
- ☐ Asian or Pacific Islander
- ☐ Black
- ☐ White

17. b. Ethnic background

- ☐ Hispanic
- ☐ Not Hispanic

18. Marital status

- ☐ Married
- ☐ Divorced
- ☐ Separated
- ☐ Widowed
- ☐ Never married

19. Indicate the number of children you have living at home of the following ages:

- ☐ None
- ☐ less than 1 year old
- ☐ 1 up to 6 years old
- ☐ 6 up to 18 years old

20. a. In what type of basic nursing education program were you prepared to become an R.N.?

- ☐ Associate Degree
- ☐ Diploma
- ☐ Baccalaureate or higher degree

b. In what year did you graduate?

1 9 ☐ ☐

c. In what State or foreign country was your school located?

________________________________________

21. What is your highest nursing-related education?

☐ Associate degree
☐ Diploma
☐ Baccalaureate in nursing
☐ Baccalaureate in other field
☐ Masters in nursing
☐ Masters in other field
☐ Doctorate

22. Have you graduated from a program leading to a certificate or master's degree preparing you to become a geriatric nurse practitioner?

☐ Yes ☐ No

23. Have you graduated from a program providing a master's degree with specialization in geriatric nursing practice?

☐ Yes ☐ No

24. During the past YEAR, have you taken a CONTINUING EDUCATION workshop (seminar, etc.) on any of the following TOPICS?
*Check all that apply.*

1 ☐ Nursing care of the aged or chronically ill
2 ☐ Medical care of the aged or chronically ill
3 ☐ Mental or social problems of the aged or chronically ill
4 ☐ Emergency procedures
5 ☐ Nursing home administration
6 ☐ Nursing management
7 ☐ Nutrition and the aged or chronically ill
8 ☐ Occupational therapy
9 ☐ Pharmacology and the aged or chronically ill
10 ☐ Physical assessment
11 ☐ Physical therapy or rehabilitation
12 ☐ Development disabilities
13 ☐ Activity programs for the aged or chronically ill
14 ☐ Social services for the aged or chronically ill
15 ☐ Refresher course for inactive nurses
16 ☐ Other *(please specify)*

________________________________________

________________________________________

________________________________________

25. What is the total number of years that you have worked for pay as a Registered Nurse since you graduated from your basic nursing educational program?

☐ less than a year
☐☐ years

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
National Center for Health Statistics
1985 National Nursing Home Survey

OMB #0937-0115
APPROVAL EXPIRES 12-31-86

CONTROL NO. ____________

# CURRENT RESIDENT QUESTIONNAIRE

## CONFIDENTIAL INFORMATION

Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with Section 308(d) of the Public Health Service Act (42 USC 242m).

**A.** Interviewer Name ____________________

**B.** Interviewer I.D. ____________________

**C.** Date of Interview ______ / ______ / ______
Mo Day Year

ENTER HERE AND ON FOLDOUT SHEET

**D.** Resident Line No. ____________________

**E.** Respondent Title ____________________

**F.** Name of Resident ________________________________
First Initial Last

1. What is the sex of this resident?

01 ☐ Male    02 ☐ Female

2. What is ____________________'s date of birth?

______/______/______ or ________
Mo. Day Year Age

**SHOW FLASHCARD # 1**

3a. What is the racial background that best describes ______ ?

01 ☐ White
02 ☐ Black
03 ☐ American Indian or Alaska Native
04 ☐ Asian or Pacific Islander
94 ☐ Don't know

3b.. Is ___________ Hispanic or not?

01 ☐ Hispanic
02 ☐ Not Hispanic
94 ☐ Don't know

4a. What was ______________________'s marital status at admission?

| | |
|---|---|
| 01 ☐ Married | 04 ☐ Separated |
| 02 ☐ Widowed | 05 ☐ Never Married |
| 03 ☐ Divorced | 94 ☐ Don't know |

b. What is ______________________'s marital status now?

| | |
|---|---|
| 01 ☐ Married | 04 ☐ Separated |
| 02 ☐ Widowed | 05 ☐ Never Married |
| 03 ☐ Divorced | 94 ☐ Don't know |

**INTERVIEWER: READ INTRODUCTORY PARAGRAPH FOR THE SOCIAL SECURITY NUMBER ONLY ONCE FOR EACH NEW RESPONDENT.**

5. As part of this survey, we would like to have ________________'s Social Security Number. Provision of this number is voluntary and not providing the number will have no effect in any way on __________________'s benefits. This number will be useful in conducting future follow-up studies. It will be used to match against the vital statistics records maintained by the National Center for Health Statistics. This information is collected under the authority of Section 306 of the Public Health Service Act.

What is ____________________'s Social Security Number?

Social Security # _________–________–___________

6. Does ______________________ have any living children?

01 ☐ Yes 02 ☐ No 94 ☐ Don't know

7. What was the date of ______________________'s current admission to this facility?

__ _____/_______/_______
Mo. Day Year

**INTERVIEWER: ENTER ADMISSION DATE ON FOLDOUT SHEET THEN ASK Q. 8.**

**SHOW FLASHCARD # 2**

8a. Where was ______________________ staying immediately before entering this facility?

01 ☐ Private residence (house or apartment)
02 ☐ Rented room, boarding house
03 ☐ Retirement home
04 ☐ Another health (including mental health) facility (SKIP TO Q. 8c)
05 ☐ Other arrangement, (SPECIFY) ________________ (SKIP TO Q. 10)
94 ☐ Don't know (SKIP TO Q. 10)

8b. At that time, was ________________ living with family members, non-family members, or alone?

01 ☐ With family members
02 ☐ With non-family members
03 ☐ Alone
94 ☐ Don't know

SKIP TO Q. 10

**SHOW FLASHCARD # 3**

8c. What type of facility was it?

01 ☐ Domiciliary or personal care facility
02 ☐ Intermediate Care Facility (ICF)
03 ☐ Skilled Nursing Facility (SNF)
04 ☐ Facility for mentally retarded
05 ☐ General or short term hospital, except psychiatric unit
06 ☐ General or short-term hospital psychiatric unit
07 ☐ Veteran's hospital
08 ☐ Mental health Center
09 ☐ Residential facility (group home, cooperative apartment, family/foster care home)
10 ☐ State mental hospital
11 ☐ Private mental hospital
12 ☐ Chronic disease, rehabilitation, geriatric or other long-term care hospital
13 ☐ Other, (SPECIFY) ________________________________
94 ☐ Don't know

**SHOW FLASHCARD # 4**

8d. Where was ________________ staying immediately before entering that facility?

01 ☐ Private residence (house or apartment)
02 ☐ Rented room, boarding house
03 ☐ Retirement home
04 ☐ This facility (SKIP TO INTERVIEWER NOTE ABOVE Q. 9)
05 ☐ Another nursing home (SKIP TO INTERVIEWER NOTE ABOVE Q. 9)
06 ☐ Another health (including mental health) facility (SKIP TO INTERVIEWER NOTE ABOVE Q. 9)
07 ☐ Other arrangement, (SPECIFY) ____________________ (SKIP TO INTERVIEWER NOTE ABOVE Q. 9)
94 ☐ Don't know (SKIP TO INTERVIEWER NOTE ABOVE Q. 9)

8e. At that time was he/she living with family members, non-family members, or alone?

01 ☐ With family members

02 ☐ With non-family members

03 ☐ Alone

94 ☐ Don't know

**INTERVIEWER NOTE: BEFORE PROCEEDING, REFER TO Q. 8c. IS CATEGORY 05 CHECKED?**

☐ **YES (CONTINUE WITH Q. 9)** **NO (SKIP TO Q. 10)**

You reported that ____________________ was staying in a hospital before entering this facility.

9a. Do you know what ____________________'s hospital diagnosis related group (DRG) category was while ____________________ was in the hospital?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 9c)

9b. What was ____________________'s DRG category?

DRG CATEGORY ______________________________
DRG Number Only

**SKIP TO Q. 9h**

9c. What condition, or diagnosis was chiefly responsible for ____________________'s admission to the hospital for care?

Principal diagnosis ______________________________

FOR OFFICE USE ONLY
DIAGNOSIS CODE
______________

9d. Were there any other conditions that existed at the time of ____________________'s admission to the hospital or that developed during the stay which affected the treatment received?

01 ☐ Yes 02 ☐ NO (SKIP TO Q. 9f) 94 ☐ Don't know (SKIP TO Q. 9f)

9e. What were those conditions?

FOR OFFICE USE ONLY
CONDITION

______________________________ 1. ______________

______________________________ 2. ______________

______________________________ 3. ______________

9f. Were any diagnostic or surgical procedures performed at the hospital?

01 ☐ YES 02 ☐ NO (SKIP TO Q. 9h) 94 ☐ Don't know (SKIP TO Q. 9h)

9g. What were the procedures?

FOR OFFICE USE ONLY
PROCEDURE

______________________________ 1. ______________

______________________________ 2. ______________

______________________________ 3. ______________

9h. How many nights did ____________________ spend in the hospital during that stay?

Number of nights ______________ 94 ☐ Don't know

10a. Has ____________________ been admitted to a short-stay hospital while a resident in this facility? That is, since (DATE OF ADMISSION) and without ____________________ being formally discharged from *this* facility.

01 ☐ Yes
02 ☐ No (SKIP TO Q. 11)
94 ☐ Don't know (SKIP TO Q. 11)

10b. How many stays did ____________________ have in short-stay hospitals since (DATE OF ADMISSION) and without being formally discharged from this facility?

Number of stays ____________________

10c. Do you know what ____________________'s hospital diagnosis related group (DRG) category was while in the hospital for the most recent stay?

01 ☐ Yes 02 ☐ NO (SKIP TO Q. 10e)

10d. What was ____________________'s DRG category for that stay?

DRG category ____________________
DRG Number Only

**SKIP TO Q. 10j**

10e. What condition or diagnosis was chiefly responsible for ____________________'s admission to the hospital for care for the most recent stay?

Principal diagnosis ____________________

FOR OFFICE USE ONLY
DIAGNOSIS CODE
____________________

10f. Were there any other conditions that existed at the time of ____________________'s admission to the hospital or that developed during the stay which affected the treatment received?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 10h) 94 ☐ Don't know (SKIP TO Q. 10h)

10g. What were those conditions?

FOR OFFICE USE ONLY
CONDITION

____________________ 1. ____________________
____________________ 2. ____________________
____________________ 3. ____________________

10h. Were any diagnostic or surgical procedures performed at the hospital?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 10j) 94 ☐ Don't know (SKIP TO Q. 10j)

10i. What were the procedures?

FOR OFFICE USE ONLY
PROCEDURE

____________________ 1. ____________________
____________________ 2. ____________________
____________________ 3. ____________________

10j. How many nights did ____________________ spend in the hospital during that stay?

Number of nights ____________________ 94 ☐ Don't know

**11a.** Has ________________ previously been a resident in this facility?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 11d) 94 ☐ Don't know (SKIP TO Q. 11d)

**11b.** How many times has ________________ been a resident in this facility, not counting the (DATE OF ADMISSION) admission?

Times in facility ______________

**11c(1).** On what dates was ________________ admitted to and discharged from this facility?

**11c(2).** Was this discharge to a short-stay or general hospital?

| | Admitted mo./day/yr. | Discharged mo./day/yr. | Yes | No | Don't know |
|---|---|---|---|---|---|
| 1. | ___/___/___ | ___/___/___ | 01 ☐ | 02 ☐ | 94 ☐ |
| 2. | ___/___/___ | ___/___/___ | 01 ☐ | 02 ☐ | 94 ☐ |
| 3. | ___/___/___ | ___/___/___ | 01 ☐ | 02 ☐ | 94 ☐ |
| 4. | ___/___/___ | ___/___/___ | 01 ☐ | 02 ☐ | 94 ☐ |
| 5. | ___/___/___ | ___/___/___ | 01 ☐ | 02 ☐ | 94 ☐ |
| 6. | ___/___/___ | ___/___/___ | 01 ☐ | 02 ☐ | 94 ☐ |
| 7. | ___/___/___ | ___/___/___ | 01 ☐ | 02 ☐ | 94 ☐ |
| 8. | ___/___/___ | ___/___/___ | 01 ☐ | 02 ☐ | 94 ☐ |

**11d.** Was ________________ ever in any *other* nursing homes beside this one?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 12) 94 ☐ Don't know (SKIP TO Q. 12)

**11e.** Not counting this facility, in how many different nursing homes has ________________ resided?

Number of different homes ______________ 94 ☐ Don't know

**11f.** Altogether, what was the total length of time that _______ spent in all those other nursing homes? Do not include time spent in this facility.

__________ Years __________ Months 94 ☐ Don't know

**11g.** What is the name of each of the *other* nursing homes at which ________________ was a resident or patient?

Facility

(1) ________________________________

(2) ________________________________

(3) ________________________________

**11h.** How many times was ________________ a resident in (NAME OF FACILITY IN Q. 11g(1))?

Times in facility ______________

11i. On what dates was __________ admitted and discharged from (NAME OF FACILITY IN Q. 11g(1))?

| | Admitted | | Discharged | |
|---|---|---|---|---|
| | Month | Year | Month | Year |
| 1. | ______/ | ______ | ______/ | ______ |
| 2. | ______/ | ______ | ______/ | ______ |
| 3. | ______/ | ______ | ______/ | ______ |

11j. How many times was __________________ a resident in (NAME OF FACILITY IN Q. 11g(2))?

Times in facility ____________

11k. On what dates was __________ admitted and discharged from (NAME OF FACILITY IN Q. 11g(2))?

| | Admitted | | Discharged | |
|---|---|---|---|---|
| | Month | Year | Month | Year |
| 1. | ______/ | ______ | ______/ | ______ |
| 2. | ______/ | ______ | ______/ | ______ |
| 3. | ______/ | ______ | ______/ | ______ |

11l. How many times was __________________ a resident in (NAME OF FACILITY IN Q. 11g(3))?

Times in facility ____________

11m. On what dates was __________ admitted and discharged from (NAME OF FACILITY IN Q. 11g(3))?

| | Admitted | | Discharged | |
|---|---|---|---|---|
| | Month | Year | Month | Year |
| 1. | ______/ | ______ | ______/ | ______ |
| 2. | ______/ | ______ | ______/ | ______ |
| 3. | ______/ | ______ | ______/ | ______ |

12. In order to follow-up on ____________________'s complete history of nursing home utilization, we would like to have any information you have that will allow us to locate ____________________'s next of kin. Please give me the names, addresses and telephone numbers of ____________________'s next of kin as well as any other relatives, friends or anyone else who might know about ____________________.

**INTERVIEWER: FILL IN AS MANY NAMES AND ADDRESSES AS AVAILABLE. PRINT ALL ENTRIES. ASK RESPONDENT TO INDICATE WHICH CONTACT IS THE "BEST CONTACT" AND PLACE AN ASTERISK ON THE LINE NEXT TO THAT NAME.**

12a. Next of kin:

☐ No next of kin on record

______ Name (First, Initial, Last) ______________________________

Street ______________________________

City and State ______________________________

Zip Code ______________

Telephone number (    ) — __________

Relationship to resident ______________________________

12b. Kin/Friend/Other:

_______ Name (First, Initial, Last) ____________________
Street ____________________
City and State ____________________
Zip Code ____________
Telephone number (    )        – ____________
Relationship to resident ____________________

12c. Kin/Friend/Other:

_______ Name (First, Initial, Last) ____________________
Street ____________________
City and State ____________________
Zip Code ____________
Telephone number (    )        – ____________
Relationship to resident ____________________

12d. Kin/Friend/Other:

_______ Name (First, Initial, Last) ____________________
Street ____________________
City and State ____________________
Zip Code ____________
Telephone number (    )        – ____________
Relationship to resident ____________________

12e. Kin/Friend/Other:

_______ Name (First, Initial, Last)____________________
Street ____________________
City and State ____________________
Zip Code ____________
Telephone number (    )        – ____________
Relationship to resident____________________

12f. Kin/Friend/Other:

_______ Name (First, Initial, Last)____________________
Street ____________________
City and State ____________________
Zip Code ____________
Telephone number (    )        – ____________
Relationship to resident____________________

13. According to ____________________'s medical record, what were the primary and other diagnoses at the time of admission, that is, on (DATE OF ADMISSION)? (SPECIFY).

| | FOR OFFICE USE ONLY<br>ICD9 | E or V CODE |
|---|---|---|
| Primary: ______________________________ | 1. | |
| Other: ______________________________ | 2. | |
| ______________________________ | 3. | |
| ______________________________ | 4. | |
| ______________________________ | 5. | |
| ______________________________ | 6. | |
| ______________________________ | 7. | |
| ______________________________ | 8. | |

14. According to ____________________'s medical record, what are ____________________'s current primary and other diagnoses? (SPECIFY)

| | FOR OFFICE USE ONLY<br>ICD9 | E or V CODE |
|---|---|---|
| Primary: ______________________________ | 1. | |
| Other: ______________________________ | 2. | |
| ______________________________ | 3. | |
| ______________________________ | 4. | |
| ______________________________ | 5. | |
| ______________________________ | 6. | |
| ______________________________ | 7. | |
| ______________________________ | 8. | |

**SHOW FLASHCARD # 5**

15. According to ____________________'s medical record does he/she currently have any of the following conditions? (MARK (X) ALL THAT APPLY)

01 ☐ Mental retardation
02 ☐ Alcohol abuse/dependence
03 ☐ Drug abuse/dependence
04 ☐ Senile dementia/chronic and organic brain syndrome
05 ☐ Depressive disorders
06 ☐ Schizophrenia
07 ☐ Other psychoses
08 ☐ Anxiety disorders
09 ☐ Personality/character disorders
10 ☐ Other mental disorders (SPECIFY) ______________________________
11 ☐ No mental disorder

16a. During (LAST MONTH), did ________________ receive any therapy services either inside or outside this facility from a licensed, registered, or professionally trained therapist?

01 ☐ Yes   2 ☐ No (SKIP TO Q. 17)   94 ☐ Don't know (SKIP TO Q. 17)

**SHOW FLASHCARD # 6**

16b. Which types of therapy did _______ receive during (LAST MONTH)? (MARK (X) ALL THAT APPLY)

01 ☐ Physical therapy
02 ☐ Occupational therapy
03 ☐ Recreational therapy
04 ☐ Speech and hearing therapy
05 ☐ Evaluation or mental health treatment by a physician other than a psychiatrist
06 ☐ Evaluation or mental health treatment by a psychiatrist
07 ☐ Evaluation or mental health treatment by a psychologist
08 ☐ Evaluation or mental health treatment by a psychiatric/clinical social worker
09 ☐ Evaluation or mental health treatment by a psychiatric nurse
10 ☐ Social services by a social worker
11 ☐ Other therapy services (SPECIFY) ________________________________

17a. Does ____________________ wear eyeglasses or contacts?   01 ☐ Yes   02 ☐ No

17b. Does ____________________ have any difficulty in seeing (when wearing glasses or contacts)?

01 ☐ Yes   02 ☐ No (SKIP TO Q. 18)   94 ☐ Don't know (SKIP TO Q. 18)

**SHOW FLASHCARD # 7**

17c. Is ________________'s sight (with glasses or contacts) partially, severely, or completely impaired, as defined on this card?

01 ☐ Partially impaired-cannot read newspaper print but can watch television 8 to 12 feet away
02 ☐ Severely impaired-cannot watch TV 8 to 12 feet away, but can recognize features of familiar persons if they are within 2-3 feet
03 ☐ Completely lost-blind
94 ☐ Don't know

18a. Does ____________________ wear a hearing aid?   01 ☐ Yes   02 ☐ No

18b. Does ____________________ have any difficulty in hearing (when wearing a hearing aid)?

01 ☐ Yes   02 ☐ No (SKIP TO Q. 19)   94 ☐ Don't know (SKIP TO Q. 19)

**SHOW FLASHCARD # 8**

18c. Is ____________________'s hearing (with hearing aid) partially, severely, or completely impaired as defined on this card?

01 ☐ Partially impaired-can hear most of the things a person says
02 ☐ Severely impaired-can hear only a few words a person says or loud noises
03 ☐ Completely lost-deaf
94 ☐ Don't know

19a. Does ____________________ currently require any assistance in bathing or showering?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 20) 94 ☐ Don't know (SKIP TO Q. 20)

19b. Does ____________________ bath or shower with the help of:

(1) Special equipment? 01 ☐ Yes 02 ☐ No
(2) Another person? 01 ☐ Yes 02 ☐ No

20a. Does ____________________ currently require any assistance in dressing?

01 ☐ Yes
02 ☐ No (SKIP TO Q. 21)
03 ☐ Remains partially or completely undressed or is dressed by another and does not participate (SKIP TO Q. 21)
94 ☐ Don't know (SKIP TO Q. 21)

20b. Does ____________________ dress with the help of:

(1) Special equipment? 01 ☐ Yes 02 ☐ No
(2) Another person? 01 ☐ Yes 02 ☐ No

21a. Does ____________________ currently require any assistance in eating?

01 ☐ Yes
02 ☐ No (SKIP TO Q. 22)
03 ☐ Requires tube or intravenous feeding (SKIP TO Q. 22)
94 ☐ Don't know (SKIP TO Q. 22).

21b. Does ____________________ eat with the help of:

(1) Special equipment? 01 ☐ Yes 02 ☐ No
(2) Another person? 01 ☐ Yes 02 ☐ No

21c. Is ____________________ fed totally by another person? 01 ☐ Yes 02 ☐ No

22a. Is ____________________ bedfast?

01 ☐ Yes (SKIP TO Q. 23) 02 ☐ No

22b. Is ____________________ chairfast?

01 ☐ Yes 02 ☐ No

23a. Does ______________________ currently require any assistance transferring in and out of bed or chairs?

01 ☐ Yes
02 ☐ No (SKIP TO Q. 24)
94 ☐ Don't know (SKIP TO Q. 24)

23b. Does ______________________ require the help of:

(1) Special equipment? 01 ☐ Yes 02 ☐ No
(2) Another person? 01 ☐ Yes 02 ☐ No

**IF YES TO EITHER Q. 23b(1) OR 23b(2), SKIP TO Q. 25**

24a. Does ______________________ currently require any assistance in walking?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 25) 94 ☐ Don't know (SKIP TO Q. 25)

24b. Does ______________________ walk with the help of:

(1) Special equipment? 01 ☐ Yes 02 ☐ No
(2) Another person? 01 ☐ Yes 02 ☐ No

25a. Does ______________________ go outside the grounds of this facility?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 26) 94 ☐ Don't know (SKIP TO Q. 26)

25b. When ______________________ goes outside the grounds, does ________________ require the help of:

(1) Special equipment 01 ☐ Yes 02 ☐ No
(2) Another person? 01 ☐ Yes 02 ☐ No

26a. Does ______________________ have an ostomy, an indwelling catheter or similar device?

01 ☐ Yes 02 ☐ No (SKIP TO Q. 26c)

26b. Does ______________________ require any assistance from another person in caring for this device?

01 ☐ Yes 02 ☐ No

26c. Does ______________________ currently require any assistance using the toilet room?

01 ☐ Yes
02 ☐ No (SKIP TO Q. 27)
03 ☐ Does not use toilet room (ostomy patient, chairfast, etc.) (SKIP TO Q. 27)
94 ☐ Don't know (SKIP TO Q. 27)

26d. Does ______________________ require the help of:

(1) Special equipment? 01 ☐ Yes 02 ☐ No
(2) Another person? 01 ☐ Yes 02 ☐ No

27a. Does ____________________ currently have any difficulty in controlling ______________ bowels?

01 ☐ Yes
02 ☐ No (SKIP TO Q. 28)
03 ☐ Not applicable, has had an ostomy (SKIP TP Q. 28)
94 ☐ Don't know (SKIP TO Q. 28)

27b. How frequently does ________________ have this difficulty?

01 ☐ Daily
02 ☐ Several times a week
03 ☐ Once a week
04 ☐ Less than once a week
94 ☐ Don't know

28a. Does ____________________ currently have any difficulty in controlling ________________ bladder?

01 ☐ Yes
02 ☐ No (SKIP TO Q. 29)
03 ☐ Not applicable has indwelling catheter, ostomy, or external device (SKIP TO Q. 29)
94 ☐ Don't know (SKIP TO Q. 29)

28b. How frequently does ________________ have this difficulty?

01 ☐ Daily
02 ☐ Several times a week
03 ☐ Once a week
04 ☐ Less than once a week
94 ☐ Don't know

28c. Does this occur only at night?

01 ☐ Yes    02 ☐ No    94 ☐ Don't know

29. Does ____________________ receive personal help or supervision in any of the following activities:

| | Yes | No | Don't know |
|---|---|---|---|
| a. Care of personal possessions? | 01 ☐ | 02 ☐ | 94 ☐ |
| b. Handling money? | 01 ☐ | 02 ☐ | 94 ☐ |
| c. Securing personal items such as newspapers, toilet articles, snack foods? | 01 ☐ | 02 ☐ | 94 ☐ |
| d. Using the telephone? (dialing or receiving calls) | 01 ☐ | 02 ☐ | 94 ☐ |

30. How long have you provided care for ____________________?

01 ☐ less than 1 month
02 ☐ 1-3 months
03 ☐ 4-6 months
04 ☐ 7-11 months
05 ☐ 12 months or more
06 ☐ Respondent does not provide care

31. How would you rate ____________________'s physical health at the present time?

01 ☐ Excellent
02 ☐ Good
03 ☐ Fair
04 ☐ Poor
94 ☐ Don't know

32. How would you rate ____________________'s mental health at the present time?

01 ☐ Excellent
02 ☐ Good
03 ☐ Fair
04 ☐ Poor
94 ☐ Don't know

**SHOW FLASHCARD # 9**

33. The types of behaviors on this card are generally considered dependent or disruptive. Does ________ display any of these types of behavior problems? Assess ________ ________________'s behavior with medications if customarily taken. (MARK (X) ALL THAT APPLY).

01 ☐ Disrobing/exposing oneself
02 ☐ Screaming
03 ☐ Being physically abusive to self or others
04 ☐ Stealing
05 ☐ Getting lost or wandering into unacceptable places
06 ☐ Inability to avoid simple dangers
07 ☐ None of the above

**SHOW FLASHCARD # 10**

34. Is ____________________ disoriented or memory impaired in the following activities to such a degree that ____________________ is impaired nearly every day in performing the basic activities of daily living, mobility, and adaptive tasks? (MARK (X) ALL THAT APPLY)

01 ☐ Unable to remember dates or time
02 ☐ Unable to identify familiar locations or people
03 ☐ Unable to recall important aspects of recent eve
04 ☐ Unable to make straight forward judgments
05 ☐ None of the above

**SHOW FLASHCARD # 11**

35. Does ______________________ display depression, anxiety, fearfulness or worry to such a degree that ______________________ is distressed or restricted in functioning nearly every day? (MARK (X) ALL THAT APPLY)

01 ☐ Displays depression
02 ☐ Displays anxiety
03 ☐ Displays fearfulness or worry
04 ☐ None of the above

**INTERVIEWER, READ:** The remaining few questions deal with charges and payment sources. Do you have this information?

01 ☐ Yes 02 ☐ No **(DETERMINE WHO HAS INFORMATION AND WHEN YOU HAVE COMPLETED ALL THE RESIDENT QUESTIONNAIRES, INTERVIEW THAT PERSON FOR THE INFORMATION, USING PROMPT CARD # 11.)**

**INTERVIEWER NOTE: BEFORE PROCEEDING, REFER TO THE ADMISSION DATE ON THE FOLDOUT SHEET. WAS THE RESIDENT ADMITTED AFTER THE FIRST DAY OF LAST MONTH?**

**01 ☐ YES (SKIP TO Q. 39) 02 ☐ NO (CONTINUE WITH Q. 36)**

**SHOW FLASHCARD # 12**

36. What were all the sources of payment for ______________________'s care for the month of (MONTH AND YEAR OF ADMISSION)? That is, for the month when ______________________ was admitted to this facility. (MARK (X) ALL THAT APPLY)

01 ☐ Own income, family support, health insurance, retirement funds, Social Security, etc.
02 ☐ Medicare
03 ☐ Medicaid — skilled nursing
04 ☐ Medicaid — intermediate care
05 ☐ State funded indigent care (excluding Medicaid)
06 ☐ Other government assistance or welfare
07 ☐ Religious organizations, foundations, volunteer agencies
08 ☐ VA contract
09 ☐ Initial payment-life care funds
10 ☐ No charge made for care (facility assumes cost)
11 ☐ Payment source not yet determined
12 ☐ Other, (SPECIFY) ______________________

**SHOW FLASHCARD # 12**

37. What was the primary source of payment for ______________________'s care for the month of (MONTH AND YEAR OF ADMISSION)?

01 ☐ Own income, family support, health insurance, retirement funds, Social Security, etc.
02 ☐ Medicare
03 ☐ Medicaid — skilled nursing
04 ☐ Medicaid — intermediate care
05 ☐ State funded indigent care (excluding Medicaid)
06 ☐ Other government assistance or welfare
07 ☐ Religious organizations, foundations, volunteer agencies
08 ☐ VA contract
09 ☐ Initial payment-life care funds
10 ☐ No charge made for care (facility assumes cost)
11 ☐ Payment source not yet determined
12 ☐ Other, (SPECIFY) ________________________________________

38. Last month, what was the total charge billed for ______________________'s care, including all charges for private duty nursing, drugs, and special medical supplies?

$________.______ per month

01 ☐ No charge was made for care

**SKIP TO INTERVIEWER NOTE ABOVE Q. 40**

39. From (DATE OF ADMISSION) through yesterday, what was the total charge billed for ______________________ care, including all charges for private duty nursing, drugs, and special medical supplies?

$________.______ per

01 ☐ Since date of admission
02 ☐ Day
03 ☐ Week
04 ☐ Month
05 ☐ Other period, (SPECIFY) ________________
06 ☐ No charge was made for care
94 ☐ Don't know (not billed yet, etc.)

**INTERVIEWER NOTE: IF Q. 38 WAS ASKED (RESIDENT IN HOME ONE FULL CALENDAR MONTH OR MORE), USE THE PHRASE "LAST MONTH" IN Q. 40. IF Q. 39 WAS ASKED, USE THE PHRASE "DURING THIS TIME" IN Q. 40.**

**SHOW FLASHCARD # 12**

| 40a. What are all the sources of payment for ________________'s care (LAST MONTH/DURING THIS TIME)?<br>(MARK (X) ALL THAT APPLY) | b. ASK FOR EACH SOURCE MARKED: What was the amount paid by ______ (LAST MONTH/DURING THIS TIME)?<br>(ENTER AMOUNT OR MARK "Don't know") | Don't know |
|---|---|---|
| 01 ☐ Own income, family support, health insurance, retirement funds, Social Security, etc. | $________.______ | 94 ☐ |
| 02 ☐ Medicare | $________.______ | 94 ☐ |
| 03 ☐ Medicaid — skilled care | $________.______ | 94 ☐ |
| 04 ☐ Medicaid — intermediate care | $________.______ | 94 ☐ |
| 05 ☐ State funded indigent care (excluding Medicaid) | $________.______ | 94 ☐ |
| 06 ☐ Other government assistance or welfare | $________.______ | 94 ☐ |
| 07 ☐ Religious organizations, foundations, volunteer agencies | $________.______ | 94 ☐ |
| 08 ☐ VA contract | $________.______ | 94 ☐ |
| 09 ☐ Initial payment-life care funds | $________.______ | 94 ☐ |
| 10 ☐ No charge made for care (facility assumes cost) | $________.______ | 94 ☐ |
| 11 ☐ Payment source not yet determined | | |
| 12 ☐ Other, (SPECIFY) ________________ | $________.______ | 94 ☐ |

**INTERVIEWER: CONTINUE TO NEXT CURRENT RESIDENT QUESTIONNAIRE**

## SUMMARY OF DATES

Date of Interview: ______/______/______
Mo. Day Year

Date of Admission: ______/______/______
Mo. Day Year

OVERLAP CASES

DRQ ________________

None ☐

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# Appendix A-2

## 1984 National Sample Survey of Registered Nurse Questionnaire

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OMB No. 0915-0088
Expiration Date: August 31, 1985

# NATIONAL SAMPLE SURVEY OF REGISTERED NURSES

Dear R.N.:

This survey is being conducted by Westat, Inc. under a contract with the Division of Nursing, Bureau of Health Professions, Health Resources and Services Administration, PHS, U.S. Department of Health and Human Services. All your responses are very important to the accuracy of our research. In addition, they are confidential and completely voluntary. The information is for statistical purposes only and will not be connected with your name.

This study is being carried out to assist with the data requirements for reports to Congress of Section 951 of PL 94-63, which requires that data be gathered, on a continuing basis, on the number and distribution of nurses; and Section 708 of PL 94-484 which requires that there be collection systems and analytical studies on the supply of health professions, including registered nurses.

The questionnaire has been divided into five sections. These sections are designed to gather information on (1) your educational background as a registered nurse, (2) your employment status in nursing, (3) your employment status if you are not currently employed in nursing, (4) prior nursing employment status and (5) general information.

Please read and follow all instructions carefully and answer all questions unless otherwise instructed. Return the completed questionnaire in the postage-paid envelope enclosed in this package at your earliest convenience. If possible, we suggest you complete it now while you have it in your hand.

Thank you for your cooperation. Your efforts are highly appreciated.

**IF YOU HAVE RECEIVED MORE THAN ONE COPY OF THE QUESTIONNAIRE, PLEASE RETURN THE EXTRA COPY(IES) ALONG WITH THE COMPLETED QUESTIONNAIRE.**

**FOR INTRAN USE ONLY**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |

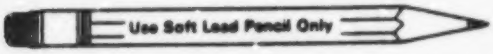
WESTAT, INC. 1650 RESEARCH BLVD., ROCKVILLE, MD 20850
TELEPHONE: (301) 251-1500
(800) 638-8985 (toll-free)

SR433A/5397-Intran-54321

**NOTE: Your responses will be read by an optical mark reader. Please review the following marking directions and examples before completing this questionnaire.**

## MARKING DIRECTIONS

- Use a black lead pencil only (No. 2 or 2½).
- Make heavy dark marks that fill the circle completely.
- Erase completely any response you wish to change.
- Make no stray marks of any kind on this sheet; write only in places provided.
- Carefully review the examples provided below on how to complete number and word responses.


Use Soft Lead Pencil Only

---

## MARKING EXAMPLES:

- **Fill in circles completely.**

Proper mark ——→ ●○○○ Improper marks ——→ ✓✗ ○

- **Written Responses**

If written responses are requested, please keep your comments within the boxed area provided. ——→

- **Number grids**

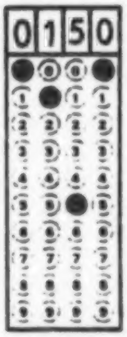
If you are asked to give numbers or dates for the answer, please record as shown below.

If your answer is 150 ——→

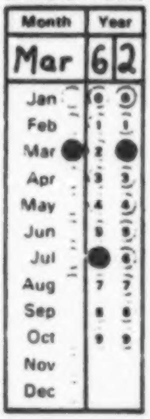
— Write the numbers in the boxes, making sure the last number is always placed in the right-hand box.

— Fill in the unused boxes with zeros.

— Then, mark the matching circle below each box.



- **Example of date grid (if March 1962)**



### PRIVACY ACT NOTIFICATION STATEMENT

The Privacy Act of 1974 (5 U.S.C. 522a) requires that an agency provide the following notice to each individual whom it asks to supply information:

1. The authority for collecting the requested information is found in Section 951 of P.L. 94-63 (42 U.S.C. 296 note) and in Title VII, Part A Section 708 of the Public Health Service Act (42 U.S.C. 292h) as amended by Public Law 94-623. Participation in the survey is voluntary and the information will be used for analytical studies on the supply of registered nurses for reports to Congress. The information is for statistical purposes only and will not be connected with your name.
2. Individually identifiable information will be used for sample definition and for preventing data duplication. Once this process is completed, individual identifiers will be destroyed.
3. While individually identifiable data exist, it will be part of the Health Resources and Services Administration (HRSA), Health Professions Planning and Evaluation System of Records, System Number 09-15-0046. One of the purposes of this system is to allow the agency to assess the current supply of health professions personnel. The applicable routine use is Reports to Congress specified under Section 951 of P.L. 94-63 and Section 708 of the PHS Act. However, only statistical information will be maintained; no identifiers will be used in Reports to Congress or for any other data purpose.

# SECTION A
# EDUCATION

1. **Please indicate (a) the Basic Nursing Education, which prepared you to become a registered nurse; (b) specify the month and year of graduation; and (c) specify the state (or country if not U.S.) in which you received your Basic Nursing Education.**

**1a. BASIC NURSING EDUCATION** (MARK ONLY ONE)

- ○ Diploma
- ○ Associate Degree
- ○ Baccalaureate
- ○ Master's
- ○ Doctorate (N.D.)

**1b. Date of graduation**

**Write the date in the boxes.**

**Then, mark the matching circle below each box.**

| Month | | Year | |
|---|---|---|---|
| | | | |
| Jan | ○ | ⓪ | ⓪ |
| Feb | ○ | ① | ① |
| Mar | ○ | ② | ② |
| Apr | ○ | ③ | ③ |
| May | ○ | ④ | ④ |
| Jun | ○ | ⑤ | ⑤ |
| Jul | ○ | ⑥ | ⑥ |
| Aug | ○ | ⑦ | ⑦ |
| Sep | ○ | ⑧ | ⑧ |
| Oct | ○ | ⑨ | ⑨ |
| Nov | ○ | | |
| Dec | ○ | | |

**1c. State (or country, if not U.S.) of Basic Nursing Education Program**

- ○ Ala.
- ○ Alaska
- ○ Ariz.
- ○ Ark.
- ○ Cal.
- ○ Colo.
- ○ Conn.
- ○ Del.
- ○ D.C.
- ○ Fla.
- ○ Ga.
- ○ Hawaii
- ○ Idaho
- ○ Ill
- ○ Ind.
- ○ Iowa
- ○ Kans.
- ○ Ky.
- ○ La.
- ○ Maine
- ○ Md.
- ○ Mass.
- ○ Mich.
- ○ Minn.
- ○ Miss.
- ○ Mo.
- ○ Mont.
- ○ Nebr.
- ○ Nev.
- ○ N. Hamp.
- ○ N. Jer.
- ○ N. Mex.
- ○ N.Y.
- ○ N. Car.
- ○ N. Dak.
- ○ Ohio
- ○ Okla.
- ○ Oreg.
- ○ Penna.
- ○ R. Is.
- ○ S. Car.
- ○ S. Dak.
- ○ Tenn.
- ○ Texas
- ○ Utah
- ○ Vt.
- ○ Virg.
- ○ Wash.
- ○ W. Virg.
- ○ Wisc.
- ○ Wyo.
- ○ Guam
- ○ Puerto Rico
- ○ Virgin Islands
- ○ Canada
- ○ Philippines
- ○ Great Britain
- ○ West Indies
- ○ Korea
- ○ India
- ○ Nigeria
- ○ Other (Specify)

2. **BEFORE STARTING your Basic Nursing Education program, did you receive a degree in any other formal post secondary education program?**

- ○ Yes (CONTINUE WITH QUESTION 2a)
- ○ No (GO TO QUESTION 3)

**2a. What was the highest degree you received?**

- ○ Associate Degree
- ○ Baccalaureate
- ○ Master's
- ○ Doctorate
- ○ Other (Specify)

**2b. Was this degree in a health-related field?**

- ○ Yes (GO TO QUESTION 3)
- ○ No (CONTINUE WITH QUESTION 2c)

**2c. What was your major field of study?** (MARK ONLY ONE

- ○ Biological and Physical Sciences
- ○ Business and Management
- ○ Education
- ○ Liberal Arts
- ○ Social Sciences
- ○ Other (Specify)

3. **SINCE GRADUATION from the Basic Nursing Education Program which you indicated in Q1, have you earned any additional degrees?**

- ○ Yes (CONTINUE WITH QUESTION 3a)
- ○ No (GO TO QUESTION 5)

**3a.** For each additional academic degree you have received since graduation from your basic nursing program, please indicate in the spaces provided below and on the next page (i) the type of degree; (ii) whether or not the degree is related to your nursing career; (iii) the month and year received; and (iv) the state (or country if not U.S.) in which the degree was received.

**(i)** ○ **Associate degree in NURSING**

**(iii) Month/Year Received**

Write the date in the boxes. Then, mark the matching circle below each box.

| DATE | | |
|---|---|---|
| Month | Year | |
| | | |
| ○ Jan | ⓪ | ⓪ |
| ○ Feb | ① | ① |
| ○ Mar | ② | ② |
| ○ Apr | ③ | ③ |
| ○ May | ④ | ④ |
| ○ Jun | ⑤ | ⑤ |
| ○ Jul | ⑥ | ⑥ |
| ○ Aug | ⑦ | ⑦ |
| ○ Sep | ⑧ | ⑧ |
| ○ Oct | ⑨ | ⑨ |
| ○ Nov | | |
| ○ Dec | | |

**(iv) State or Country**

○ Ala.
○ Alaska
○ Ariz.
○ Ark.
○ Cal.
○ Colo.
○ Conn.
○ Del.
○ D.C.
○ Fla.
○ Ga.
○ Hawaii
○ Idaho
○ Ill.
○ Ind.
○ Iowa
○ Kans.
○ Ky.
○ La.
○ Maine
○ Md.
○ Mass.
○ Mich.
○ Minn.
○ Miss.
○ Mo.
○ Mont.
○ Nebr.
○ Nev.
○ N. Hamp.
○ N. Jer.
○ N. Mex.
○ N.Y.
○ N. Car.
○ N. Dak.
○ Ohio
○ Okla.
○ Oreg.
○ Penna.
○ R. Is.
○ S. Car.
○ S. Dak.
○ Tenn.
○ Texas
○ Utah
○ Vt.
○ Virg.
○ Wash.
○ W. Virg.
○ Wisc.
○ Wyo.

○ Not in USA (Specify) ☐

**(i)** ○ **Associate degree in ANOTHER field**

**(ii) Is this degree related to your nursing career?**

○ Yes ○ No

**(iii) Month/Year Received**

Write the date in the boxes. Then, mark the matching circle below each box.

| DATE | | |
|---|---|---|
| Month | Year | |
| | | |
| ○ Jan | ⓪ | ⓪ |
| ○ Feb | ① | ① |
| ○ Mar | ② | ② |
| ○ Apr | ③ | ③ |
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**(iv) State or Country**

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○ Not in USA (Specify) ☐

**(i)** ○ **Baccalaureate in NURSING**

**(iii) Month/Year Received**

Write the date in the boxes. Then, mark the matching circle below each box.

| DATE | | |
|---|---|---|
| Month | Year | |
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| ○ Jan | ⓪ | ⓪ |
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○ Not in USA (Specify) ☐

**(i)** ○ **Baccalaureate in ANOTHER field**

**(ii) Is this degree related to your nursing career?**

○ Yes ○ No

**(iii) Month/Year Received**

Write the date in the boxes. Then, mark the matching circle below each box.

| DATE | | |
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○ Not in USA (Specify) ☐

(i) ○ **Master's in NURSING**

(iii) **Month/Year Received**

Write the date in the boxes.

Then, mark the matching circle below each box.

| DATE | | |
|---|---|---|
| Month | Year | |
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| Jan ○ | ⓪ | ⓪ |
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| Mar ○ | ② | ② |
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| May ○ | ④ | ④ |
| Jun ○ | ⑤ | ⑤ |
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Not in USA (Specify)

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(i) ○ **Master's in ANOTHER field**

(ii) **Is this degree related to your nursing career?**

○ Yes ○ No

(iii) **Month/Year Received**

Write the date in the boxes.

Then, mark the matching circle below each box.

| DATE | | |
|---|---|---|
| Month | Year | |
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| Jan ○ | ⓪ | ⓪ |
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| Mar ○ | ② | ② |
| Apr ○ | ③ | ③ |
| May ○ | ④ | ④ |
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| Jul ○ | ⑥ | ⑥ |
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Not in USA (Specify)

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(i) ○ **Doctorate in NURSING**

(iii) **Month/Year Received**

Write the date in the boxes.

Then, mark the matching circle below each box.

| DATE | | |
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| Jan ○ | ⓪ | ⓪ |
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○ Wyo.

Not in USA (Specify)

---

(i) ○ **Doctorate in ANOTHER field**

(ii) **Is this degree related to your nursing career?**

○ Yes ○ No

(iii) **Month/Year Received**

Write the date in the boxes.

Then, mark the matching circle below each box.

| DATE | | |
|---|---|---|
| Month | Year | |
| | | |
| Jan ○ | ⓪ | ⓪ |
| Feb ○ | ① | ① |
| Mar ○ | ② | ② |
| Apr ○ | ③ | ③ |
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○ Utah
○ Vt.
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○ Wash.
○ W. Virg.
○ Wisc.
○ Wyo.

Not in USA (Specify)

**IF YOUR HIGHEST DEGREE IS A MASTER'S OR DOCTORATE, CONTINUE WITH QUESTION 4; OTHERWISE GO TO QUESTION 5.**

4. **What is the one primary focus of the highest degree you now hold?**
(MARK ONLY ONE)

**4a.**
○ Education (GO TO QUESTION 5)
○ Supervision/Administration (GO TO QUESTION 5)
○ Clinical Practice
○ Other (Specify) → (GO TO QUESTION 5)

**4b.** **IF THE PRIMARY FOCUS WAS CLINICAL PRACTICE, specify the type.**
(MARK ONLY ONE)

○ Community/Public Health
○ Maternal-child
○ Midwifery
○ Geriatrics/Gerontology
○ Medical/Surgical
○ Psychiatric-mental health
○ Other (Specify) →

**If you have not received a formal degree or certificate as a nurse practitioner (see definition below), mark here ○ and continue with Question 6.**

**A formal NURSE PRACTITIONER TRAINING PROGRAM is an organized educational program consisting of formal classes and clinical practice designed to prepare registered nurses to perform in an expanded role in the delivery of primary health care including the ability to: obtain a health and medical history; perform a screening physical examination; order routine laboratory tests; diagnose and manage under established protocols common self-limiting and/or stabilized chronic conditions; provide teaching and counseling in the area of disease prevention, health promotion, and maintenance; and to recognize when the patient should be referred to a physician or other health care provider.**

**5. Did you graduate and receive a degree or certificate from a formal nurse practitioner program?**
- ○ Yes (CONTINUE WITH QUESTION 5a)
- ○ No (GO TO QUESTION 6)

**5a. What was the length in months of the nurse practitioner program you attended?**

**MONTHS**

| | |
|---|---|
| | |
| ○ 0 | ○ 0 |
| ○ 1 | ○ 1 |
| ○ 2 | ○ 2 |
| ○ 3 | ○ 3 |
| ○ 4 | ○ 4 |
| ○ 5 | ○ 5 |
| ○ 6 | ○ 6 |
| ○ 7 | ○ 7 |
| ○ 8 | ○ 8 |
| ○ 9 | ○ 9 |

Write the number in the boxes.

Then, mark the matching circle below each box

**5b. When you completed this program, which of the following did you receive?**
- ○ Certificate
- ○ Master's
- ○ Other (Specify) →

☐

**5c. For what practitioner specialty did you study?** (MARK ONLY ONE)
- ○ Pediatric
- ○ Midwifery
- ○ Maternity
- ○ Women's Health
- ○ Family
- ○ Adult
- ○ Geriatric
- ○ School
- ○ Other (Specify) →

☐

**6. Are you currently enrolled in a formal education program leading to an academic degree with a nursing or nursing related major?**
- ○ Yes (CONTINUE WITH QUESTION 6a)
- ○ No (GO TO QUESTION 7)

**6a. Are you considered a full-time or part-time student?**
- ○ Full-time student
- ○ Part-time student

**6b. Specify the type of degree for which you are now studying.** (MARK ONLY ONE)
- ○ Associate Degree
- ○ Baccalaureate
- ○ Master's
- ○ Doctorate
- ○ Other (Specify) →

☐

**6c. How are your tuition and fees being financed?** (MARK ALL THAT APPLY)
- ○ Personal savings
- ○ Your own personal earnings from employment
- ○ Spouse's earnings from employment
- ○ Parental contributions
- ○ Employer tuition reimbursement plan (including Veterans Administration)
- ○ Federal traineeship, scholarship, or grant
- ○ Federally-assisted loan
- ○ State or local government loan or scholarship
- ○ Non-government scholarship, loan or grant
- ○ University teaching or research fellowship
- ○ Other sources (Specify) →

☐

**A CONTINUING EDUCATION PROGRAM is a formal learning program designed to update and increase knowledge and skills in health care. It does not include study for an academic degree.**

**7. During the past year, have you participated in any type of continuing education program?**

○ Yes (CONTINUE WITH QUESTION 7a)
○ No (GO TO QUESTION 8)

**Continuing education programs may include: workshops/institutes, clinical conferences, staff development courses, individual studies and other kinds of programs. During the past year, for each type of program in which you participated, inside or outside your employment setting, mark the type(s) of financing (who paid for your participation) for all the continuing education programs you attended.**

**7a. During the past year did you participate in a workshop/institute?**

○ Yes (CONTINUE WITH QUESTION 7b)
○ No (GO TO QUESTION 7c)

**7b. How did you pay for your participation in the workshop/institute?**

SOURCE OF FINANCING

| | No Cost | Employer Paid | I Paid Myself | Other | |
|---|---|---|---|---|---|
| First Workshop/Institute | ○ | ○ | ○ | ○ | → specify |
| Second Workshop/Institute | ○ | ○ | ○ | ○ | → specify |
| Third Workshop/Institute | ○ | ○ | ○ | ○ | → specify |

**7c. During the past year did you participate in a clinical conference?**

○ Yes (CONTINUE WITH QUESTION 7d)
○ No (GO TO QUESTION 7e)

**7d How did you pay for your participation in the clinical conference?**

SOURCE OF FINANCING

| | No Cost | Employer Paid | I Paid Myself | Other | |
|---|---|---|---|---|---|
| First Clinical Conference | ○ | ○ | ○ | ○ | → specify |
| Second Clinical Conference | ○ | ○ | ○ | ○ | → specify |
| Third Clinical Conference | ○ | ○ | ○ | ○ | → specify |

**7e. During the past year did you participate in a staff development course?**

○ Yes (CONTINUE WITH QUESTION 7f)
○ No (GO TO QUESTION 7g)

**7f. How did you pay for your participation in the staff development course?**

SOURCE OF FINANCING

| | No Cost | Employer Paid | I Paid Myself | Other | |
|---|---|---|---|---|---|
| First Staff Development Course | ○ | ○ | ○ | ○ | specify |
| Second Staff Development Course | ○ | ○ | ○ | ○ | specify |
| Third Staff Development Course | ○ | ○ | ○ | ○ | specify |

**7g. During the past year did you participate in individual studies for which continuing education units (CEU's) were granted (e.g., multi-media, modular curricula)?**

○ Yes (CONTINUE WITH QUESTION 7h)
○ No (GO TO QUESTION 7i)

**7h. How did you pay for your participation in these individual studies?**

SOURCE OF FINANCING

| | No Cost | Employer Paid | I Paid Myself | Other | |
|---|---|---|---|---|---|
| First Individual Study | ○ | ○ | ○ | ○ | specify |
| Second Individual Study | ○ | ○ | ○ | ○ | specify |
| Third Individual Study | ○ | ○ | ○ | ○ | specify |

**7i. During the past year did you participate in other kinds of continuing education programs?**

○ Yes (CONTINUE WITH QUESTION 7j)
○ No (GO TO QUESTION 8)

**7j. How did you pay for your participation in these other studies?**

SOURCE OF FINANCING

| | No Cost | Employer Paid | I Paid Myself | Other | |
|---|---|---|---|---|---|
| First Other Study (Specify) ______ | ○ | ○ | ○ | ○ | specify |
| Second Other Study (Specify) ______ | ○ | ○ | ○ | ○ | specify |
| Third Other Study (Specify) ______ | ○ | ○ | ○ | ○ | specify |

# SECTION B
# EMPLOYMENT STATUS

**EMPLOYMENT ALSO INCLUDES: BEING ON A TEMPORARY LEAVE OF ABSENCE FROM YOUR NURSING POSITION; ON VACATION; ON SICK LEAVE; OR A PRIVATE DUTY NURSE NOT ON A CASE AT THE MOMENT.**

**8. What is the total number of years that you have worked for pay as a registered nurse since you graduated from your basic nursing educational program?**

○ One or more years (CONTINUE WITH QUESTION 8a)
○ Less than a year (GO TO QUESTION 9)
○ Never worked as a nurse (GO TO QUESTION 20)

**8a. If one or more years, indicate the number of years.** →

Write the number in the boxes.

Then, mark the matching circle below each box.

| YEARS | |
|---|---|
| | |
| ⓪ | ⓪ |
| ① | ① |
| ② | ② |
| ③ | ③ |
| ④ | ④ |
| ⑤ | ⑤ |
| ⑥ | ⑥ |
| | ⑦ |
| | ⑧ |
| | ⑨ |

**9. Were you employed in nursing as of November 15, 1984?**

○ Yes (CONTINUE WITH QUESTION 9a)
○ No (GO TO QUESTION 19)

**9a. Indicate the city, county, and state of employment on November 15, 1984. If you were not employed in a fixed location (e.g., you were a private duty nurse), consider the area where you spent most of your working time as your location of employment.**

City

☐

County

☐

State (or Country, if not USA)

☐

FOR OFFICE USE ONLY

| SMSA | | | | County | | | State | |
|---|---|---|---|---|---|---|---|---|
| ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ |
| ① | ① | ① | ① | ① | ① | ① | ① | ① |
| ② | ② | ② | ② | ② | ② | ② | ② | ② |
| ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ |
| ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ |
| ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ |
| ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ |
| ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ |
| ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ |
| ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ |

**Questions 10-17 refer to your principal employment setting and nursing position. If you currently hold more than one position in nursing, provide your answers in terms of what you consider your principal nursing position during your regular work year. For example, if you hold more than one nursing position (e.g., day/night or winter/summer), consider the principal nursing position as the one at which you spend the greater amount of time.**

**10. Using the following list, please mark the one entry from the list which best describes the TYPE OF SETTING in which you are currently working in your principal nursing position.** (MARK ONLY ONE ANSWER)

**HOSPITAL (Exclude nursing home units in hospitals but include all clinics and other services of the hospital)**

- ○ Non-federal short-term hospital (for example, acute care hospital)
- ○ Non-federal long-term hospital (for example, state mental hospital)
- ○ Federal government hospital
- ○ Other type of hospital (Specify)

**NURSING HOME/EXTENDED CARE FACILITY**

- ○ Nursing home unit in hospital
- ○ Other nursing home
- ○ Other type of extended care facility (Specify)

**NURSING EDUCATION**

- ○ LPN/LVN program
- ○ Diploma program (RN)
- ○ Associate degree program (RN)
- ○ Baccalaureate and/or higher degree nursing program
- ○ Other (Specify)

**PUBLIC HEALTH/COMMUNITY HEALTH SETTING**

- ○ Official state health department
- ○ Official city or county health department
- ○ Combination (official/voluntary) nursing service
- ○ Visiting nurse service (VNS/VNA)
- ○ Other home health agency (non-hospital-based)
- ○ Community mental health center
- ○ Community/Neighborhood health center
- ○ Planned parenthood/family planning center
- ○ Rural health center
- ○ Other (Specify)

**STUDENT HEALTH SERVICE**

- ○ Board of education (public school system)
- ○ Private or parochial elementary or secondary school
- ○ College or university
- ○ Other (Specify)

**OCCUPATIONAL HEALTH (EMPLOYEE HEALTH SERVICE)**

- ○ Private industry
- ○ Government
- ○ Other (Specify)

**AMBULATORY CARE SETTING EMPLOYEE (e.g., Physician/Dentist office)**

- ○ Solo practice (physician)
- ○ Partnership (one or more physicians)
- ○ Group practice (physicians)
- ○ Free-standing clinic (physicians)
- ○ Ambulatory surgical center (not hospital-based)
- ○ Dental practice
- ○ Health Maintenance Organization (HMO)
- ○ Other (Specify)

**SELF-EMPLOYED**

- ○ Solo practice
- ○ Partnership with other nurses
- ○ Partnership with physician(s)
- ○ Partnership with other health professionals
- ○ Other (Specify)

**OTHER**

- ○ Central or regional office of Federal agency
- ○ State Board of Nursing
- ○ Nursing or health association
- ○ Health planning agency
- ○ Other (Specify)

**11. Are you currently employed in your principal nursing position through a Temporary Employment Service (e.g., UPJOHN, MEDICAL PERSONNEL POOL)?**

○ Yes

○ No

**12. Using the list below, please mark the one item which best corresponds to your current position title for your principal nursing position.**
(MARK ONLY ONE)

- ○ Administrator or assistant administrator
- ○ Certified nurse anesthetist (CRNA)
- ○ Charge nurse
- ○ Clinical nurse specialist
- ○ Consultant
- ○ Dean, director, or assistant/associate director of nursing education
- ○ Director or assistant/associate director of nursing service
- ○ General duty nurse
- ○ Head nurse or assistant head nurse
- ○ In-service education director or instructor
- ○ Instructor
- ○ Nurse clinician
- ○ Nurse coordinator
- ○ Nurse midwife
- ○ Nurse practitioner
- ○ Patient care coordinator
- ○ Private duty nurse
- ○ Professor or assistant/associate professor
- ○ Public health nurse
- ○ Researcher
- ○ School nurse
- ○ Staff nurse
- ○ Supervisor or assistant supervisor
- ○ Team leader
- ○ No position title (the only RN on staff)
- ○ Other (Specify) ↓

☐

**13. For your current principal nursing position, please enter the approximate percentage of your time spent in the following areas during a usual work week. Please make sure the total equals 100%.**

Percent

A. Administration .......................................... ______ %

B. Consultation with agencies and/or professionals ...... ______ %

C. Direct patient care, not including staff supervision ..... ______ %

D. Research .......................................... ______ %

E. Supervision..........................................

F. Teaching nursing or other students in health care occupations (include all class preparation time)........ ______ %

G. Other (Specify) ↓

☐ ... ______ %

**TOTAL MUST EQUAL.** ......... 100 %

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| A | | | B | | | C | | | D | | | E | | | F | | | G | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |

**In Question 14, if you are EMPLOYED BY AN INSTITUTION OR AGENCY and are scheduled to work for the normal "full" work week throughout the normal work year, as defined by the agency, mark category "1." If you work less than the normal "full" work week and/or less than the normal work year, mark either "2" or "3," whichever is applicable.**

**If you are SELF-EMPLOYED and are generally available for work throughout the year during what would constitute a normal "full" work week, mark category "1." If you restrict yourself to work only a segment of the work week and/or year, mark either "2" or "3," whichever is applicable.**

14. Do you:
   - ○ 1. Work an entire calendar year or school or academic year on a full-time basis?
   - ○ 2. Work an entire calendar year or school or academic year on a part-time basis?
   - ○ 3. Work only part of the normal work year on either a full- or part-time basis?

**15. Approximately how many hours are you usually scheduled to work during a normal work week (as defined by the agency) at your principal nursing position? If you do not work on a routine schedule, how many hours do you usually work during a week at your principal nursing position?** →

| HOURS | |
|---|---|
| ☐ | ☐ |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

**16. Approximately how many weeks are there in your normal work year for your principal nursing position (include paid vacation, etc.)?** →

| WEEKS | |
|---|---|
| ☐ | ☐ |
| 0 | 0 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| | 6 |
| | 7 |
| | 8 |
| | 9 |

**17. PLEASE SPECIFY THE ANNUAL EARNINGS FOR YOUR CURRENT PRINCIPAL POSITION ONLY. Provide gross salary before deductions for taxes, social security, etc. If you do not have a set annual salary, provide an estimate of your annual earnings. (For example, part-time, private duty, or self-employed)** →

Gross or Estimated Annual Earnings

| $ | | | , | | |
|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 |

**18. Do you hold more than one position in nursing for pay?**
   - ○ Yes (CONTINUE WITH QUESTION 18a)
   - ○ No (GO TO QUESTION 22)

**18a. Please indicate the type of work you do in your other nursing position(s) for pay.** (MARK ALL THAT APPLY)
   - ○ Private duty nursing
   - ○ Work through Temporary Employment Service
   - ○ Hospital staff nurse
   - ○ Teaching
   - ○ Consultation/Research
   - ○ Other (Specify) ↓

☐

**18b. Please provide an estimate of the average number of hours per week you spent in your other nursing position(s). Please also provide an estimate of the total number of weeks in 1984 that you would spend in this other nursing position(s).**

Write the number in the boxes.

Then, mark the matching circle below each box.

| Average Number of HOURS Per Week | | WEEKS in 1984 | |
|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ |
| 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 |
| 6 | 6 | | 6 |
| 7 | 7 | | 7 |
| 8 | 8 | | 8 |
| 9 | 9 | | 9 |

**18c. Please provide an estimate of the total annual earnings for the year from your other nursing position(s).**

Write the number in the boxes.

Then, mark the matching circle below each box

Gross or Estimated Annual Earnings

| $ | | , | | |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |
| 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 |

**GO TO QUESTION 22**

## SECTION C
## EMPLOYMENT STATUS OF RNs NOT CURRENTLY EMPLOYED IN NURSING

**19. How long has it been since you last worked for pay as a registered nurse?**

○ Less than a year
○ One year or more (Specify)

**YEARS**

Write the number in the boxes.

Then, mark the matching circle below each box.

| | |
|---|---|
| ☐ | ☐ |
| ⓪ | ⓪ |
| ① | ① |
| ② | ② |
| ③ | ③ |
| ④ | ④ |
| ⑤ | ⑤ |
| ⑥ | ⑥ |
| ⑦ | ⑦ |
| ⑧ | ⑧ |
| ⑨ | ⑨ |

**20. Are you currently employed in an occupation other than nursing?**

○ Yes (CONTINUE WITH QUESTION 20a)
○ No (GO TO QUESTION 21)

**20a. Are you considered a full-time or part-time employee?**

○ Full-time
○ Part-time

**20b. Are you employed in a health-related agency or position?**

Yes
No

**21. Are you actively seeking employment as a registered nurse (e.g., making inquiries as to availability of employment, answering advertisements, having interviews)?**

○ Yes (CONTINUE WITH QUESTION 21a)
○ No (GO TO QUESTION 22)

**21a. Indicate the number of weeks during which you have been actively seeking a nursing position.**

○ Less then a week
○ One week or more (Specify)

**WEEKS**

Write the number in the boxes.

Then, mark the matching circle below each box.

| | |
|---|---|
| ☐ | ☐ |
| ⓪ | ⓪ |
| ① | ① |
| ② | ② |
| ③ | ③ |
| ④ | ④ |
| ⑤ | ⑤ |
| ⑥ | ⑥ |
| ⑦ | ⑦ |
| ⑧ | ⑧ |
| ⑨ | ⑨ |

**21b. Are you looking for a full-time or part-time nursing position?**

○ Full-time
○ Part-time

# SECTION D
# PRIOR NURSING EMPLOYMENT STATUS

**22. Were you employed in nursing one year ago on November 15, 1983?**

○ Yes (CONTINUE WITH QUESTION 22a)
○ No (GO TO QUESTION 23)

**If you were EMPLOYED BY AN INSTITUTION OR AGENCY and were scheduled to work for the normal "full" work week throughout the normal work year, as defined by the agency, mark category "1." If you worked less than the normal "full" work week and/or less than the normal work year, mark either "2" or "3," whichever is applicable.**

**If you were SELF-EMPLOYED and were generally available for work throughout the year during what would constitute a normal "full" work week, mark category "1." If you restricted yourself to work only a segment of the work week and/or year, mark either "2" or "3," whichever is applicable.**

**22a. Following the definitions of full-time or part-time employment explained above, in your nursing position of one year ago did you:**

○ 1. Work an entire calendar year or school or academic year on a full-time basis?
○ 2. Work an entire calendar year or school or academic year on a part-time basis?
3. Work only part of this normal work year on either a full- or part-time basis?

**22b. Indicate the city, county, and state of employment on November 15, 1983. If you were not employed in a fixed location (e.g., you were a private duty nurse), consider the area where you spent most of your working time as your location of employment.**

**City**

**County**

**State (or Country, if not USA)**

**IF YOU ARE NOT CURRENTLY EMPLOYED AS AN RN, GO TO QUESTION 23.**

**22c. Were you employed by your current employer in your nursing position one year ago?**

○ Yes, current employer in the same position or self-employed in both years
○ Yes, current employer in a different position
○ No, the employer was different but the type of position was the same
○ No, the employer was different and the type of position was different

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| SMSA | | | | County | | | State | |
|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |

# SECTION E
# GENERAL INFORMATION

**We would like you to answer some additional questions for use in the statistical interpretation of your responses.**

**23. Sex:**

○ Female ○ Male

**24. What is your year of birth?** ——→ **YEAR**

Write the number in the boxes.

Then, mark the matching circle below each box.

| YEAR | | | |
|---|---|---|---|
| 1 | | | |
| | | ⓪ | ⓪ |
| ● | | ① | ① |
| | | ② | ② |
| | | ③ | ③ |
| | | ④ | ④ |
| | | ⑤ | ⑤ |
| | | ⑥ | ⑥ |
| | | ⑦ | ⑦ |
| | ⑧ | ⑧ | ⑧ |
| | ⑨ | ⑨ | ⑨ |

**25. What is your racial/ethnic background?** (MARK ONLY ONE)

○ Hispanic
○ American Indian or Alaskan Native
○ Asian or Pacific Islander
○ Black, not of Hispanic origin
○ White, not of Hispanic origin

**26. What is your current marital status?**

○ Now married, spouse present
○ Now married, spouse absent
○ Widowed, divorced, separated
○ Never married

**27. Children living at home most of the time are: (include all children who live with you 6 months of the year or more)**

○ No children at home
○ All less than 6 years old
○ All 6 years old or older
○ Some less than 6 and some 6 or over

**28. Mark the category that best indicates approximately how much income you, or if you are currently married, you and your spouse together anticipate having earned as income during 1984.** (Include your annual employment earnings before deductions; your spouse's annual employment earnings before deductions, if married; and all other income, including alimony, child support, dividends, royalties, interest, social security, retirement, etc.)

| | |
|---|---|
| ○ $15,000 or less | ○ $50,001-75,000 |
| ○ $15,001-25,000 | ○ $75,001-100,000 |
| ○ $25,001-35,000 | ○ $100,001-150,000 |
| ○ $35,001-50,000 | ○ More than $150,000 |

**29. In what city, county, and state were you living on November 15, 1984?**

City

County

State (or Country, if not USA)

**FOR OFFICE USE ONLY**

| SMSA | | | | County | | | State | |
|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |

**30. Did you reside in the same city on November 15, 1983 and on November 15, 1984?**

○ Yes (GO TO QUESTION 31)
○ No (CONTINUE WITH QUESTION 30a)

**30a. Indicate the city, county, and state where you were living on November 15, 1983?**

City

County

State (or Country, if not USA)

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| SMSA | | | | County | | | State | |
|---|---|---|---|---|---|---|---|---|
| ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ |
| ① | ① | ① | ① | ① | ① | ① | ① | ① |
| ② | ② | ② | ② | ② | ② | ② | ② | ② |
| ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ |
| ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ |
| ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ |
| ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ |
| ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ |
| ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ |
| ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ |

**31. Indicate when you were issued your first U.S. license (by one of the 50 states or the District of Columbia) to practice as a registered nurse and specify the state which issued this license to you.**

**31a. Year of first U.S. license:**

| | | |
|---|---|---|
| ○ 1984 | ○ 1981 | ○ 1978 |
| ○ 1983 | ○ 1980 | ○ 1977 |
| ○ 1982 | ○ 1979 | ○ Prior to 1977 |

**31b. State which issued first license:**

○ Ala.
○ Alaska
○ Ariz.
○ Ark.
○ Cal.
○ Colo.
○ Conn.
○ Del.
○ D.C.
○ Fla.
○ Ga.
○ Hawaii
○ Idaho
○ Ill.
○ Ind.
○ Iowa
○ Kans.
○ Ky.
○ La.
○ Maine
○ Md.
○ Mass.
○ Mich.
○ Minn.
○ Miss.
○ Mo.
○ Mont.
○ Nebr.
○ Nev.
○ N. Hamp.
○ N. Jer.
○ N. Mex.
○ N.Y.
○ N. Car.
○ N. Dak.
○ Ohio
○ Okla.
○ Oreg.
○ Penna.
○ R. Is.
○ S. Car.
○ S. Dak.
○ Tenn.
○ Texas
○ Utah
○ Vt.
○ Virg.
○ Wash.
○ W. Virg.
○ Wisc.
○ Wyo.

**32. Are you currently or were you ever licensed to practice as a practical/vocational nurse?**

○ Yes ○ No

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**Please note that the following question (Q. 33) is very important in order to determine how many nurses in the country your answers may represent. As soon as this determination is calculated and the proper statistical code assigned, your name(s) and registration number(s) will no longer be associated with the other information in this questionnaire.**

**33. In the space provided below, please provide the following information.**

**Column A — List all states in which you are now actively licensed.**

**Column B — List the permanent number on your certificate of registration or license for each state you listed.**

**Column C — List your complete name as it appears on each license, or mark if same as on questionnaire label.**

| (A)<br>State of Licensure | (B)<br>Permanent number on certificate of registration or license | (C)<br>Name as it appears on the registration or license, or mark circle at right of name line if same as on front of questionnaire. | (D)<br>OFFICE USE ONLY |
|---|---|---|---|
| 1. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 2. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 3. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 4. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 5. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 6. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 7. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 8. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 9. ______ | ______ | ______ Last First MI (same ○) | ○ |
| 10. ______ | ______ | ______ Last First MI (same ○) | ○ |

**FOR OFFICE USE ONLY**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |

**We need to know how to get in touch with you should we have any questions regarding your answers. The next few items are for that purpose and will not be associated with your other answers once the data are compiled. Thank you.**

**34. What is the phone number where we can contact you?** →

Write the number in the boxes.

Then, mark the matching circle below each box.

| Area Code | | | Phone Number | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ | ⓪ |
| ① | ① | ① | ① | ① | ① | ① | ① | ① | ① |
| ② | ② | ② | ② | ② | ② | ② | ② | ② | ② |
| ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ | ③ |
| ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ | ④ |
| ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ |
| ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ | ⑥ |
| ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ | ⑦ |
| ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ | ⑧ |
| ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ | ⑨ |

**BE SURE TO ANSWER QUESTION 34a AT LEFT.**

**34a. If we should need to contact you regarding the questionnaire, when is the best time to call?**

________________________ am/pm
Time period - specify am or pm

________________________
Day(s) of week

**35. Is your name correct as it appears on the front of this questionnaire?**

○ Yes
○ No (please indicate your correct name) →

________________________
Last First Middle Initial

**36. Is your address correct as it appears on the front of this questionnaire?**

○ Yes
○ No (please indicate your correct address) →

________________________
Organization (If applicable)

________________________
Street

________________________
City State ZIP

**37. Name, address, and telephone number of a person who could forward mail to you or tell us how to communicate with you if you move.** →

Name ________________________
Last First Middle Initial

Address ________________________
Organization (If applicable)

________________________
Street

________________________
City State ZIP

Phone ________________________
Area Code Number

38. Use this space for any special comments you wish to make about any of your responses to the questions or for any additional remarks you may have.

**THANK YOU VERY MUCH FOR YOUR HELP. PLEASE RETURN THE QUESTIONNAIRE IN THE ENCLOSED PRE-ADDRESSED POSTAGE-PAID ENVELOPE.**

**SEND TO:** Westat, Inc.
Registered Nurses' Survey
1650 Research Blvd.
Rockville, MD 20850

# Appendix B

## Key Abstracts Relevant to Long-Term Care

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# Key Abstracts Relevant to Long-Term Care

1. Price, James L., and Mueller, Charles W. Professional Turnover: The Case of Nurses. New York, 1981.

This book is a study of registered nurses in hospitals who leave their jobs voluntarily.

Price presents a causal model for turnover and proceeds to study the various relationships proposed in his central model.

This study explores the relationship between job satisfaction, intent to leave, and actual turnover as well as examines various factors and how they relate to these three variables.

The sample was made up of 1,101 registered nurses in 7 voluntary, short-term general hospitals (response rate = 80 percent).

Findings revealed that most nurses, regardless of age and amount of time worked, are similar in that six determinants operate to directly or indirectly influence the probability of turnover.

Job satisfaction was increased with greater variety in work, greater participation in work-related decisions, greater communication about work, and greater opportunity for job advancement. Higher job satisfaction positively influenced intent to stay, which reduced likelihood of turnover.

The study includes recommendations of ways to reduce turnover.

2. Institute of Medicine. Improving the Quality of Care in Nursing Homes. National Academy Press, Washington, DC, 1986.

The Institute of Medicine was asked to study and report on government regulation of nursing homes. The report includes recommendations for changes in regulatory policies and procedures to enhance the ability of the regulatory system to ensure that nursing home residents receive satisfactory care.

The report contains the following major conclusions derived in part from the prior experience and knowledge of the committee members and in part from the findings of this study (text not included):

- Quality of care and quality of life in many nursing homes are not satisfactory.
- More effective government regulation can substantially improve quality in nursing homes. A stronger federal role is essential.

- Specific improvements are needed in the regulatory system.
- There are opportunities to improve quality of care in nursing homes that are independent of changes in the Medicaid payment policies or bed supply.
- Regulation is necessary but not sufficient for high-quality care.
- A system to obtain standardized data on residents is essential.
- The regulatory system should be dynamic and evolutionary in outlook.

This report includes a history of nursing home regulation and reform. Discussion includes a critical review of the factors affecting quality of care in nursing homes. Recommendations for change are included and supported by the text of the report.

3. Slavitt, Dinah B., Stamps, Paula L., Piedmont, Eugene B., et al. "Nurses Satisfaction With Their Work Situation." Nursing Research, 27(2): pp. 114-120, March-April, 1978.

Although job satisfaction is related to performance within the work setting, precise definitions and methods of measuring satisfaction are lacking, especially in medical settings. This article describes a 2-year research project that investigated the concept of occupational satisfaction and methods of measuring this concept among in- and out-patient nurses. The Index of Work Satisfaction, a scale that measures relative importance of various components of satisfaction and attitudes toward the components, as well as an overall summary score, was developed. Methodology of the scale development, utilizing hospital nurses and nurses involved in a private group-practice setting, is described. Analysis of the responses from the nurses indicated that the scale measured occupational satisfaction of nurses in both settings.

4. McCloskey, Joanne C. "What Rewards Will Keep Nurses on the Job?" American Journal of Nursing, 74(4): pp. 600-602, April 1975.

This study examined 151 hospital staff nurses who had left jobs within the 4 months before the study. The study examined demographic data and ratings of job "rewards." Results included the following: nurses felt they would be attracted to a job that offered good fringe benefits and salary and had child care centers near the hospital.

The nurses felt that to stay with the job, the important factors were in-service education programs, tuition reimbursement, career advancement opportunities, and implementation of primary care nursing.

5. Rublee, Dale A. "Predictors of Employee Turnover in Nursing Homes." The Journal of Long-Term Care Administration, 14(2): pp. 5-7, Summer 1986.

This study surveyed employees at five nursing homes during the winter of 1983. The sample included employees from service, technical, clerical, and nursing services. The survey was administered again in 1984. A list was provided of those who had terminated their employment between 1983 and 1984, as well as the dates and reasons for termination. This information permitted assessment of the extent to which actual turnover was predictable from the nursing home analysis.

Intention or probability of quitting was the strongest correlate of actual turnover in this study. Also, level of pay and accurate communication about the nature of the job were both inversely related to turnover, and routinization was positively related to turnover.

6. National Foundation for Long-Term Health Care. Nurse Recruitment and Retention in Long-Term. Proceedings: Conference held March 17-18, 1980.

Under a grant from Ross Laboratories, the National Foundation for Long-Term Health Care brought together representatives of eight national organizations concerned with nursing and long term care. The objectives of the roundtable conference were to define the issues involved in nurse recruitment and retention and to make specific suggestions for actions by individual nursing home administrators to meet their nurse staffing needs.

The conference began with an introduction and overview of the nurse manpower shortage problem. Sr. Michael Bernadette provided national statistics on nurse manpower and interpreted trends in nurse training. Josephine Darmsteatter offered similar information on licensed practical nurses. Gloria Morrow gave an overview of federal and associated efforts to promote nurse recruitment and retention.

Some important points made in the introduction were:

- There is a documented shortage of RNs; location and specialty shortages are more severe than the aggregate statistics on nurse manpower indicate.

- Admissions to RN programs are decreasing, as is the level of federal support for nurse education.

- Long-term care providers question whether RNs are being trained appropriately for employment in long-term care; many RN programs stress administrative advancement over hands-on nursing practice, other programs reverse the emphasis.

- State and federal regulations controlling nursing homes restrict the facility's flexibility in nurse staffing.

- Stereotypes are problems at several levels:
    - Some school of nursing faculties appear to have negative stereotypes about long-term care as well as an inadequate understanding of the skills needed by long-term care nurses.
    - Many long-term care administrators have stereotypes about the roles of nurses in long-term care.
    - Nurses themselves sometimes have stereotypes about long-term care nursing and about the roles of other levels of nursing.
- There are more LPNs than RNs out of the work force.
- It appears that high school counselors are discouraging entry into LPN and associate degree nursing programs.

After the opening papers, attention turned to specific facility-based actions for nurse recruitment and retention. The theme that evolved was "A nurse retained is a nurse recruited." The 14 papers presented offered a wealth of information and tips on improving a facility's capability to recruit and retain nurses. Following are highlights from these papers:

- Nursing homes should be aggressive in encouraging students to enter the field of long-term care nursing; these efforts can complement other facility programs.
- Recruitment is not an isolated issue; a facility's community relations program should carry the message that it is a good place to work.
- There are numerous benefits for facilities to affiliate with schools of nursing as RN or LPN clinical practice sites; student exposure to long-term care sometimes encourages seeking employment in long-term care.
- Long-term care representation at nurse job fairs can be effective in alerting nurses to the opportunities and challenges of long-term care.
- The director of nursing plays a critical role in both recruitment and retention; thus, it is important that additional training be given to develop the skills needed.
- Recruiting the foreign-trained nurse is feasible under certain circumstances.
- Nursing homes should actively work to upgrade the status of long-term care nursing by examining their salaries and benefits, by utilizing nurses' skills appropriately, and by encouraging nurses' professional growth.

- Employing the right person for the job and clearly defining performance expectations are basic in the recruitment and retention process.

- Nursing homes should assist their employees who want to get additional training for skill development and career advancement; the nursing assistant who obtains LPN or RN training is likely to return to nursing home employment.

- Individual nursing homes can offer geriatric refresher training programs to help inactive nurses reenter the job market and specifically prepare them for employment in long-term care.

- Nursing personnel pools are a problem in almost all states; facilities can work together to establish their own pools.

- Because the nurse shortage is an immediate problem, facilities must take action to meet their nurse staffing needs; at the same time, there needs to be research to provide more information on long-term solutions to the problem.

7. Hay, Donald. "Health Care Services in 100 Superior Nursing Homes." Long Term Care and Health Services Administration Quarterly, 1(4): pp. 300-313, 1977.

This was a descriptive study of health care services in "100 superior nursing homes," designated as such by the American Health Care Association. (The criteria for selection were not discussed in this article.) The superior nursing homes were described in the following way: (A predominant focus was on functional rehabilitation vs. custodial care.)

- Served by full-time administrators, plus assistant administrator in some.

- One or more M.D.s designated to provide medical leadership.

- Higher percentage of RNs.

- Higher percentage of RN coverage for all three shifts.

- 56 percent had medical social workers.

- 2/5 had a full- or part-time dietician.

- 2/3 had physical therapy.

- 2/5 had occupational therapy.

- 90 percent had recreational therapy.

- Pharmacist - varied.

- Dentists - consultants.

Nearly all the homes held staff conferences and in-service training and many were associated with schools, i.e., used as training institutions for students.

8. American Health Care Association. A Study of Personal and Organizational Factors That Influence Recruitment and Retention of Nurses in Long- Term Care Institutions. Unpublished study, 1983.

The principal focus of this study was to determine the personal and organizational factors that are most important to nurses in making a decision to seek employment in or remain employed in nursing homes. By pinpointing such factors, the study established a credible base of knowledge for decisionmakers in the long-term care industry who must develop policies and practices that will attract and retain sufficient numbers of nurses to meet service and quality needs.

The results represent the perceptions and attitudes of 2,127 individuals including 906 nursing students, 203 inactive nurses, 428 nurses presently employed in nursing homes, 317 nurses presently employed in hospitals, and 273 administrators of nursing homes and hospitals. The overall report presents in detail the nurses' views toward practicing in long-term care facilities. It compares the views, perceptions, and values of nurses in different work settings. It also compares the views, perceptions, and values of nurses and facility administrators. The relative job satisfaction levels of nurses in different work settings are presented along with their perceptions of what it would be like to work in a different setting.

Given its findings and conclusions, the report offers recommendations regarding how the nation's nursing home administrators might improve their ability to attract and retain nurses.

9. Cotler, M.P. Registered Nurses and Nursing Homes: Satisfactions, Prestige and Supply. Dissertation, University of California, Los Angeles, 1985.

This study of registered nurses was concerned with shortages of RNs in skilled nursing facilities (SNFs) despite rising demand, and with the low prestige of those jobs making it difficult to recruit competent personnel.

Design was a random one-fourth (N = 11,600) sample mail survey of the 47,000 currently licensed Los Angeles County RNs. Usable sample size was 1,859 (16.1 percent). The SNF sample was underrepresented; there also are almost no published data on this population. The overall sample was generally representative of the nursing population but somewhat better educated and better paid.

We compared personal characteristics, jobs, and attitudes of SNF nurses with nurses at other work sites. We analyzed perceptions of SNFs' jobs by all nurses. Indexes of job attitudes and a comparison of SNFs with other jobs were developed after factor analysis. Multiple regression was employed to analyze nursing wages, job frustrations, satisfaction, and quitting.

Findings: SNF nurses are significantly older, diploma trained, and receive about $4,000 less annual nursing wages and fewer fringe benefits ($p < .05$). They are likely to have completed a baccalaureate and to have taken 1 or more years off from nursing ($p < .05$). Job conditions in SNFs are rated comparatively lower than other settings by all nurses. but SNF nurses rate them higher than other nurses. Ratings by nurses who worked in SNFs as students or have prior SNF experience were not more positive.

Job satisfaction is high among respondents and similar among SNF nurses. SNF nurses were more satisfied with administration ($p < .05$). They spend more time supervising than other nurses and report independent responsibility for patient care and management. We cannot infer that SNF nurses are less qualified or perform less well at their work. Satisfaction did not predict intention to quit, rather it was associated with frustration with working conditions. Although SNF nurses were more frustrated with working conditions, they did not report significantly different intentions to quit.

Recommendations include increasing pay and benefits, publicizing potential rewards of SNF jobs, careful selection of SNF sites for nursing students, and affiliating SNFs with hospitals to tap existing nursing pools.

10. Burge, J.M. "A Descriptive Survey of Personality Traits, Social Characteristics, and Stereotype Attitudes Toward the Aged in Three Types of Nurses Giving Care to the Aged in Nursing Homes." Dissertation, University of Florida, August 1976.

The purpose of this investigation was to determine: (1) the personality traits in three types of nurses working with the aged in nursing homes, (2) the social characteristics of the nurses, and (3) the stereotype attitudes toward the aged of the nurses.

The population was composed of 110 nurses working in nursing homes in Tallahassee and Jacksonville, Florida. Three types of nurses composed the population and were: (1) 30 registered nurses, (2) 30 licensed practical nurses, and (3) 50 nursing assistants.

The instruments used for the study were the Gordon Personal Profile, the Tuckman-Lorge Attitude Questionnaire, and a Biographical Questionnaire developed by the investigator.

Randall (1965) has stated that among health professionals, nurses should have the keenest interest in nursing home care. He accounts for this claim by implying that in nursing homes, nursing care is the primary service, while in hospitals, nursing is subsidiary. Yet, in spite of this, there are few nurses actively seeking employment in these types of institutions.

Why are nurses not going into the area of geriatric specialization? Is is because it takes an individual with a certain type of personality to work most effectively in the area of geriatrics? Is its possible that the attitudes toward the aged are so negatively stereotyped that nurses do not elect to be associated with that area of nursing? Are there, to date, still unidentified factors that may prevent nurses from working with the aged? One way of finding at least partial answers to some of these questions is to look at those personality traits, social characteristics, and attitudes of people who do elect to go into the area of geriatrics. This study, therefore, proposed to take a closer and more scrutinizing look at the employees who are currently engaging in geriatric specialization.

## Need for the Study

This study was motivated by a recognition of the growing need for nursing personnel to choose geriatrics as a field of specialization. The proportion of elderly people in our population increases steadily, but:

- Preference for working with different age groups of patients did not differ significantly by age of nurses.
- Black nurses were more stereotyped in their attitudes toward the aged than white nurses.
- The degree of stereotype attitudes toward the aged in nurses did not vary significantly by nurses' age, sex, religion, satisfaction or dissatisfaction in working the aged, percentage of time estimated in working with the aged, and number of years worked with the aged.
- Type of educational programs for registered nurses was not found to be significantly different when related to degree of stereotype attitudes toward the aged.
- Type of nurse was significantly different when related to degree of stereotype attitudes toward the aged. Registered nurses held less stereotype attitudes toward the aged than licensed practical nurses and nursing assistants. There was no significant difference between licensed practical nurses and nursing assistants in their stereotype attitudes toward the aged.

11. American Nurses Association. Nursing and Long Term Care: Toward Quality Care for the Aging.

This document is the result of over 1 year of planning and work on the part of the American Nurses Association (ANA) to fulfill the charge of the Senate Subcommittee on Long-Term Care given to the ANA in October 1973. After hearing ANA's testimony to the Subcommittee, the ANA was asked to prepare a report on the problems of providing "skilled nursing" as it is presently defined by Medicare and Medicaid, as well as the related problems of alternatives to institutional care, supply and training of qualified personnel, and methods of reimbursement for quality care.

A committee of ANA members representing various units and interests within the organization formed an Advisory Committee to design the strategy for the report, including broad representation of other health professional groups, and to finalize the document, once the input was received.

The strategy used was twofold: First, to call representatives of 22 national organizations concerned with health delivery, aging, and the aged consumer; second, to hold regional hearings for grass roots input from various sections of the country. The representatives of the national organizations met in three different task forces, one concerned with "Definitions and Classifications," one with "Manpower and Training," and one with "Options for Health Care." Each task force met three times over a period of 6 months, and the entire group met together at the beginning and at the end of this time to integrate their reports and recommendations.

The following recommendations were made by the ANA's Committee on Skilled Nursing Care based on the results of efforts, research, and recommendations of three task forces composed of representatives from all areas of the health field. In addition to the work of task forces, six hearings on long-term care were held throughout the country, and information from witnesses' testimony was used in compiling these recommendations.

- A national policy on care of the aging should be developed, within which should be provision for care of the elderly in any kind of setting, the right to high-quality care, and the right of the elderly to decisionmaking in regard to their own care. The national policy on care of the aging should be built on the fact that the aged are vital, dynamic persons who have made and who continue to make contributions to society.

- Because high costs of essential health care services, coupled with the present provision of fragmented, uncoordinated, and incomplete health services stand in the way of effective delivery of health services to the aged, a plan for national health insurance should be developed to ensure that health care services are provided for all citizens, guaranteeing coverage for the full range of comprehensive health services. The national health insurance plan should clearly recognize the distinctions between health care and medical care, and provide optional utilization of health care services.

- In considering options or alternatives for care, the Committee on Skilled Nursing Care recommends that a range of health and supportive services be made available to all elderly citizens. Thus, whether a person chooses to live in his own home and have services brought to him, to go to the services in a day care setting, or to move to a nursing home, he/she would have ensurance that the needed services would be available.

- The word "skilled" should be deleted from the phrase "skilled nursing care" as it currently exists in the Federal standards and as the term is generally applied in actual practice, because it is not measurable nor can it be defined when related to the needs of a patient.

- Because quality health care will depend primarily upon the competency of the persons providing direct care, all professional persons and workers involved in long-term health care in any setting should have a background in the basic care of the aging. These gerontological concepts should be taught at the educational levels of the individuals in the depth and detail each can understand and use. Preparation in gerontological nursing should be within an open educational system that promotes career mobility. The educational program of registered nurses at all levels should be developed and strengthened to correct specific deficiencies in the area of gerontological nursing.

12. Pecarchik, Robert, and Nelson, Bardin. "Employee turnover in Nursing Homes." American Journal of Nursing, 73(2): pp. 289-290, February 1973.

This study examined employee turnover in 83 Pennsylvania nursing homes. This study compared rates and factors that may be related to turnover among nursing personnel in proprietary and nonprofit homes.

Administrators reported that personnel were leaving because of "not enough money." The study found that the proprietary homes paid lower average wages than the nonprofit homes except to LPNs whom they paid more. Personnel benefits were better in the nonprofit homes for all classifications of nurses and more services were available to residents in nonprofit homes.

13. Slocum, John W., Susman, Gerald I., and Sheridan, John E. "An Analysis of Need Satisfaction and Job Performance Among Professional and Paraprofessional Hospital Personnel." Nursing Research, 21(4): pp. 338-342, July-August 1972.

This study tested the generality of industrial-based research on Maslow's need theory in a hospital setting. Four hypotheses relating need satisfaction to organizational position and job performance were tested among 39 professional and 41 paraprofessional employees of a medium-sized hospital. Professional nurses reported significantly higher satisfaction with their job security, prestige within the organization, and job autonomy than did paraprofessional employees. Job performance was significantly correlated with the fulfillment of self-actualization needs for professional employees.

14. Gillis, Sr Marion. "Attitudes of Nursing Personnel Toward the Aged." Nursing Research, 22(6): pp. 517-520, Nov-Dec 1973.

To determine differences in attitudes toward the aged based on four selected variables--age, education, length of employment, and type of agency--registered nurses, licensed practical nurses, and nurses' aides were randomly selected from five nursing homes and a general hospital. They were asked to complete an instrument that measured their reactions to 48 opinion statements rated on a four-point scale, ranging from strongly agree to strongly disagree. A one-way analysis of variance was used to test for differences in attitudes toward the aged. Hypotheses that nursing personnel 45 years and over, who have earned a B.S. degree in nursing, who had cared for the aged for more than 9 years, and who were employed in a hospital would be more positive in their attitudes toward the aged were rejected. Implications for nursing education and nursing service are discussed.

15. Feldbaum, Eleanor G., and Feldbaum, Merle B. "Caring For the Elderly: Who Dislikes it Least." Journal of Health Policy, Politics, and Law, 5(4): pp. 62-72, Spring 1981.

This article examines work plans of student nurses and work practices of RNs to ascertain who actually provides care for elderly patients. Investigation of geriatric nurses reveals that few plan to or do work with the elderly. Salaries are low and opportunities for career advancement are limited, especially for those that are employed in nursing homes. The study found that older nurses and those of minority backgrounds were more likely to provide geriatric care.

16. Campbell, Margaret. "Study of the Attitudes of Nursing Personnel Toward the Geriatric Patient." Nursing Research, 20(2), pp. 147-151, March-April 1971.

This study investigated: (1) the relationship between acceptance of stereotypes about old people by nursing personnel and various characteristics of the nurse, (2) the relationship between acceptance of these stereotypes and the age group with which nurses prefer to work, and (3) the relationship between the incentives of shift preference or salary differential and increased willingness to work with geriatric patients.

The sample included 165 RNs, LPNs, and nurses' aides who were on duty toward a 24-hour period of time on selected nursing units in a hospital setting.

The major results included finding that all the nursing personnel expressed some degree of stereotyped attitudes toward the elderly. RNs were the least willing to accept stereotyped attitudes but spent the least time working with them and preferred not to work with them. Salary increase and shift preference did not greatly increase willingness to work with the elderly.

17. Stryker, Ruth, "How to Reduce Employee Turnover in Nursing Homes and Other Health Care Organizations." Springfield, IL, 1981.

The purpose of this study was to accumulate data on turnover among nursing assistants and other nursing personnel in long-term care facilities in Minnesota. The study provides a good review of the subject of turnover and what is known about nursing turnover. Relevant results include findings that higher turnover of all personnel is associated with proprietary homes, and that lower turnover occurred in institutions with fewer SNF beds and fewer than 75 employees.

There were little data on RN turnover included in the results.

# Appendix C

## Definition of Variables Used In Regression Analyses

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# Definition of Variables Used in Regression Analyses

This appendix presents the definition of the variables used in the regression analyses. The variables used in the 1985 National Nursing Home Survey (NNHS) are shown in Tables C-1 and C-2 , while Tables C-3 and C-4 list those from the 1984 National Sample Survey of Registered Nurses. The first column of each table lists the variables as they were shown in the body of the report (see Tables 16, 17, 26, 27, 28, 29, and 31). The second column cites the questionnaire item(s) used to define each variable. For the NNHS, items starting with 'FQ' come from the Facility Questionnaire and those starting with 'NQ' come from the Nursing Staff Questionnaire. All of the items cited for the NSSRN come from the NSSRN Questionnaire. All questionnaires are reproduced in Appendix A. The final column in the tables provided a brief description of how each variable was defined.

Categorical variables are listed in Tables C-1 and C-3 for the NNHS and the NSSRN, respectively. Each categorical variable was coded a one if the RN or nursing home had the attribute and zero otherwise. The RN work activity and policy decision indicators in Table C-1 were coded to one if the RN gave either a response of 'Always' or 'Very Often' and zero otherwise. Continuous variables for the two surveys are shown in Tables C-2 and C-4.

Table C-1. Categorical variables from the 1985 National Nursing Home Survey

| Variable | Source Item | Description |
|---|---|---|
| Ownership | FQ2a | |
| Proprietary | | Proprietary facility* |
| Nonprofit | | Nonprofit facility* |
| Government | | Government facility* |
| Chain Status | FQ2c, FQ2d | |
| Independent | | Independent nongovernment facility |
| Small chain | | Nongovernment group <10 members |
| Medium chain | | Nongovernment group 10 to 99 members |
| Large chain | | Nongovernment group 100+ members |
| Certification | FQ6, FQ8, FQ10 | |
| SNF only | | Skilled nursing facility only |
| SNF & ICF | | Skilled nursing facility and intermediate care facility |
| ICF only | | Intermediate care facility only |
| Neither | | Neither SNF nor ICF certification |
| State minimum RN requirements | State regulations | |
| RN all shifts | | RN required on all shifts |
| Full-time RN and director of nursing | | At least one full-time RN and director of nursing must be an RN |
| Full-time RN | | At least one full-time RN |
| Director of nursing to be an RN | | Director of nursing must be an RN |
| No full-time RN required | | No requirements for a full-time RN |

*Defined by National Center for Health Statistics.

Table C-1. Categorical variables from the 1985 National Nursing Home Survey (continued)

| Variable | Source Item | Description |
|---|---|---|
| Physician services | FQ20 | |
| On premises at least day time | | Physician(s) on premises at least during the day time hours every weekday and on-call on weekends and at other times |
| On premises at scheduled times | | Physicians(s) on premises at scheduled times no less than once per month and on call remainder of time |
| On call only | | Physician available on-call only |
| Other | | Any other arrangement |
| Race | NQ17 | |
| White | | White, not of Hispanic origin |
| Black | | Black, not of Hispanic origin |
| Other | | Hispanic, American Indian, Alaskan Native, Asian, Pacific Islander |
| Marital status | NQ18 | |
| Married | | Married |
| Divorced or separated | | Divorced or separated |
| Widowed | | Widowed |
| Never Married | | Never married |
| Children | NQ19 | |
| One or more <6 | | At least one child living at home less than 6 years old |
| All 6 years or more | | All children living at home at least 6 years old |
| None | | No children living at home |

Table C-1. Categorical variables from the 1985 National Nursing Home Survey (continued)

| Variable | Source Item | Description |
|---|---|---|
| Education | NQ21 | Highest nursing related education |
| Diploma | | Diploma in nursing |
| Associate degree | | Associate degree in nursing |
| B.S. in nursing | | Baccalaureate in nursing |
| M.S. in nursing | | Masters in nursing |
| Other degree | | Baccalaureate or masters in an other field or any doctorate |
| Continuing education | NQ24 | Indicator of any continuing education during the last year |
| Geriatric education | NQ22, NQ23 | Certificate or master's degree with specialization in geriatric nursing or preparing the RN to become a geriatric nurse practioner |
| Other employment | NQ10 | Indicator of any other employment as an RN outside of the facility |
| Shift | NQ4 | |
| Days | | Principal shift during the day |
| Evenings | | Principal shift during the evening |
| Nights | | Principal shift during the night |
| Rotating | | Rotating shift |
| Type of position | NQ6 | |
| General nursing | | Staff, charge, head or assistant head nurse |
| Specialty nursing | | Clinical nursing specialist, nurse practitioner, in-service instructor/educator |

Table C-1. Categorical variables from the 1985 National Nursing Home Survey (continued)

| Variable | Source Item | Description |
|---|---|---|
| Type of position (cont.) | | |
| Supervisor | | Supervisor or assistant, DON or assistant DON, or administrator |
| Other | | Other |
| Work activity indicators | | Response of always or very often |
| Administering routine therapies | NQ11a | E.g., medications, dressings, decubitus care, bowel and bladder re-training |
| Administering complex therapies | NQ11b | E.g., intravenous and gastic feedings, oxygen, suction, removal of fecal impactions |
| Giving personal care | NQ11c | E.g., bathing, toileting, dressing, feeding and other activities of daily living |
| Observing and recording | NQ11d | E.g., changes in physical, mental and emotional status of patients; charting patient condition, etc. |
| Teaching and counseling patients | NQ11e | E.g., activities of daily living, treatments, ostomy care, foot care |
| Determining individual patient care plans | NQ11f | E.g., assessing patient status, planning care, communicating to staff |
| Evaluating and modifying patient care plans | NQ11g | |
| Assigning and supervising nursing personnel giving care | NQ11h | |
| Planning and providing diversion/recreation programs | NQ11i | |

Table C-1. Categorical variables from the 1985 National Nursing Home Survey (continued)

| Variable | Source Item | Description |
|---|---|---|
| Work activity indicators (cont.) | | |
| Research | NQ12a | Planning and/or participating in research |
| Conducting staff education | NQ12b | |
| Attending staff education | NQ12c | |
| Education of students | NQ12d | Participating in or conducting educational experiences for nursing or other health professional students |
| Policy decision indicators | | Response of always or very often |
| Determining institutional policy | NQ13a | E.g., types of professional services needed to provide care to residents, patient groupings, protection of residents' personal property rights, etc. |
| Determining patient care policy | NQ13b | E.g., nursing care standards, staffing mix and ratios, equipment and supplies, etc. |
| Determining personnel policy | NQ13c | E.g., salary schedules, job benefits, staffing schedules, etc. |
| Full-time indicator | NQ3b | Considered full-time employment by your facility |

Table C-2. Continuous variables from the 1985 National Nursing Home Survey

| Variable | Source Item | Description |
|---|---|---|
| Admissions per bed | FQ13, FQ14 | 1984 calendar year admissions per total currently available beds |
| Number of services | FQ16a-FQ16r | Total number of the services listed in Facility Question 16 offered by the facility |
| Staffing | FQ15(5)<br>FQ21 | Full-time equivalent staffing (as defined by NCHS) per 1000 inpatient days for each type of staff listed in Facility Question 21 |
| Deaths per discharge | FQ14a<br>FQ14b | Number of persons who died during calendar year 1984 while a resident of the facility divided by the number of discharges from the facility during calendar year 1984 |
| Reimbursement rates | | |
| Medicare indicator* | FQ7B | Indicator of a positive Medicare reimbursement rate |
| Medicare rate per day | FQ7B | |
| Medicaid SNF indicator* | FQ9b | Indicator of a positive Medicaid SNF reimbursement rate |
| Medicaid SNF rate per day | FQ9b | |
| Medicaid ICF indicator* | FQ11b | Indicator of a positive Medicaid ICF reimbursement rate |
| Medicaid ICF rate per day | FQ11b | |
| Private pay rates | | |
| Skilled care indicator* | FQ24a | Indicator of a positive skilled care rate |

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*Categorical variable.

Table C-2. Continuous variables from the 1985 National Nursing Home Survey (Continued)

| Variable | Source Item | Description |
|---|---|---|
| Private pay rates (cont.) | | |
| Skilled care rate per day | FQ24a | |
| Intermediate care indicator* | FQ24b | Indicator of intermediate care rate |
| Intermediate care rate per day | FQ24b | |
| Residential care indicator* | FQ24c | Indicator of residential care rate |
| Residential care rate per day | FQ24c | |
| Inpatient days | FQ15-5 | Calendar year 1984 total inpatient days |
| Hospital beds in county | | Total number of hospital beds in county for 1984 from the Area Resource File |
| Weekly salary | NQ7 | RN's average weekly salary before deductions |
| Age of RN | NQ15 | 1985 minus year of birth |
| Number of years worked as an RN | NQ25 | Total number of years worked for pay as a RN since graduation from basic nursing education program. Less than a year was treated as one-half year. |

*Categorical variable.

Table C-3. Categorical variables from the 1984 National Sample Survey of Registered Nurses

| Variable | Source Item | Description |
|---|---|---|
| Race | Q25 | |
| Other | | Hispanic, Indian, Asian, Pacific Islander |
| Black | | Black (not Hispanic) |
| White | | White (not Hispanic) |
| Marital status with children | Q26, Q27 | Current marital status and children living at home most of the time |
| Married, all children < 6 years | | |
| Married, all children ≥ 6 years | | |
| Married, with children both ages | | |
| Married, no children | | |
| Married, child's age unknown | | |
| Never married | | |
| Widowed, separated, divorced | | |
| Marital status | Q26 | Current marital status |
| Married, spouse present | | |
| Married, spouse absent or widowed, divorced or separated | | |
| Never married | | |
| Children | Q27 | Children living at home most of the time |
| No children | | |
| All children < 6 years | | |
| All children ≥ 6 years | | |
| Children of both ages | | |

Table C-3. Categorical variables from the 1984 National Sample Survey of Registered Nurses (continued)

| Variable | Source Item | Description |
|---|---|---|
| Highest education | Q1, Q3 | Highest educational preparation as an RN |
| Diploma | | |
| Associate degree | | |
| B.S. nursing | | |
| B.S. another field | | |
| M.S. nursing or another field | | |
| Temporary employment service | Q11 | Indicator of employment through a tempory employment service in principal nursing position |
| Work schedule | Q14 | |
| Full-time | | Work full-time for an entire calendar or academic year |
| Part-time | | Work part-time for an entire calendar or academic year |
| Part-year | | Work only part of the year |
| Other employment | Q18, Q18a | Indicator of any nursing employment other than the principal nursing position |
| Type of position | Q12 | |
| Staff | | Charge nurse, general duty nurse, public health nurse, school nurse, staff nurse, team leader, only RN on staff |
| Speciality | | Clinical nurse specialist, nurse clinician, nurse midwife, nurse practitioner |

Table C-3. Categorical variables from the 1984 National Sample Survey of Registered Nurses (continued)

| Variable | Source Item | Description |
|---|---|---|
| Type of position (cont.) | | |
| Administration | | Administrator or assistant administrator; dean, director or assistant/associate director of nursing education; director of nursing service; supervisor or assistant supervisor |
| Head nurse | | Head nurse or assistant head nurse |
| Other | | All other positions not list above |

Table C-4. Continuous variables from the 1984 National Sample Survey of Registered Nurses

| Variable | Source Item | Description |
|---|---|---|
| Age | Q24 | 1984 minus year of birth |
| Years since graduation | Q1B2 | 1985 minus year of graduation from basic nursing educational preparation |
| Weekly salary | Q17 | Annual earnings for current principal position divided by 52 |

# Appendix D

## Tables Associated With RN Utilization

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Table D-1. Estimated number and percent of registered nurses by employment setting and age.

| | | | Employment setting | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Nursing home | | Hospital | | Other | | Unknown | |
| Age | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(•) | 100.0(•) |
| Under 35....... | 633,321 | 42.6 | 25,165 | 21.9 | 511,706 | 50.6 | 96,257 | 26.9 | 192(•) | 92.8(•) |
| 35-44.......... | 398,333 | 26.8 | 28,696 | 24.9 | 257,758 | 25.5 | 111,864 | 31.2 | 15(•) | 7.2(•) |
| 45-54.......... | 262,053 | 17.6 | 30,599 | 26.6 | 146,344 | 14.5 | 85,110 | 23.7 | 0(•) | 0.0(•) |
| 55-64.......... | 147,877 | 10.0 | 22,949 | 19.9 | 73,692 | 7.3 | 51,237 | 14.3 | 0(•) | 0.0(•) |
| 65 and over.... | 19,731 | 1.3 | 5,388 | 4.7 | 6,294 | 0.6 | 8,049 | 2.2 | 0(•) | 0.0(•) |
| Unknown........ | 24,410 | 1.6 | 2,280 | 2.0 | 16,160 | 1.6 | 5,969 | 1.7 | 0(•) | 0.0(•) |
| **Standard errors** | | | | | | | | | | |
| Total..... | 7,157 | 0.0 | 2,791 | 0.0 | 8,681 | 0.0 | 4,519 | 0.0 | 118 | 0.0 |
| Under 35....... | 10,960 | 0.6481 | 1,147 | 1.1142 | 9,487 | 0.6793 | 2,758 | 0.7877 | 117 | 6.7916 |
| 35-44.......... | 6,266 | 0.3517 | 1,364 | 1.2290 | 5,160 | 0.4396 | 2,159 | 0.5255 | 14 | 6.7916 |
| 45-54.......... | 4,517 | 0.3180 | 1,585 | 1.0832 | 3,441 | 0.3498 | 3,074 | 0.7018 | 0 | 0.0 |
| 55-64.......... | 4,798 | 0.3490 | 1,496 | 0.9584 | 3,307 | 0.3598 | 1,627 | 0.4432 | 0 | 0.0 |
| 65 and over.... | 1,438 | 0.0980 | 713 | 0.5757 | 834 | 0.0822 | 1,147 | 0.3096 | 0 | 0.0 |
| Unknown........ | 1,228 | 0.0839 | 360 | 0.3227 | 1,013 | 0.0991 | 746 | 0.2068 | 0 | 0.0 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-2. Estimated number and percent of registered nurses by employment setting and race.

| Race/Ethnicity | Total |  | Employment setting |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Nursing home |  | Hospital |  | Other |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(*) | 100.0(*) |
| White......... | 1,329,118 | 89.5 | 103,640 | 90.1 | 897,276 | 88.7 | 327,955 | 91.6 | 207(*) | 100.0(*) |
| Black......... | 67,175 | 4.5 | 4,781 | 4.2 | 47,707 | 4.7 | 14,687 | 4.1 | 0(*) | 0.0(*) |
| Hispanic...... | 23,390 | 1.6 | 1,266(*) | 1.1(*) | 16,996 | 1.7 | 5,128 | 1.4 | 0(*) | 0.0(*) |
| American Indian/ Alaskan..... | 4,996 | 0.3 | 441(*) | 0.4(*) | 3,165 | 0.3 | 1,389(*) | 0.4(*) | 0(*) | 0.0(*) |
| Asian/Pacific | 44,813 | 3.0 | 2,839 | 2.5 | 36,181 | 3.6 | 5,794 | 1.6 | 0(*) | 0.0(*) |
| Unknown....... | 16,233 | 1.1 | 2,110 | 1.8 | 10,629 | 1.1 | 3,494 | 0.9 | 0(*) | 0.0(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 7,157 | 0.0 | 2,791 | 0.0 | 8,681 | 0.0 | 4,519 | 0.0 | 118 | 0.0 |
| White......... | 14,001 | 1.0067 | 3,299 | 1.3173 | 10,280 | 1.0805 | 5,257 | 0.8937 | 118 | 0.0 |
| Black......... | 10,370 | 0.6929 | 1,186 | 1.0231 | 7,147 | 0.7008 | 2,580 | 0.7125 | 0 | 0.0 |
| Hispanic...... | 3,463 | 0.2330 | 401 | 0.3511 | 2,369 | 0.2301 | 951 | 0.2713 | 0 | 0.0 |
| American Indian/ Alaskan..... | 703 | 0.0468 | 191 | 0.1829 | 545 | 0.0526 | 389 | 0.1080 | 0 | 0.0 |
| Asian/Pacific | 7,776 | 0.5188 | 705 | 0.6415 | 6,412 | 0.6168 | 1,242 | 0.3467 | 0 | 0.0 |
| Unknown....... | 817 | 0.0533 | 323 | 0.2903 | 755 | 0.0743 | 516 | 0.1419 | 0 | 0.0 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-3. Estimated number and percent of registered nurses by employment setting, marital status and age of youngest child.

| Marital status and age of children | Total | | Employment setting | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Nursing home | | Hospital | | Other | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.. . | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(•) | 100.0(•) |
| Married | | | | | | | | | | |
| Married, child less than 6 | 194,793 | 13.1 | 8,241 | 7.2 | 151,624 | 15.0 | 34,788 | 9.7 | 140(•) | 67.7(•) |
| Married, child 6 or older.. | 387,317 | 26.1 | 37,943 | 33.0 | 232,913 | 23.0 | 116,461 | 32.5 | 0(•) | 0.0(•) |
| Married, children less than 6 and 6 or older.. | 117,296 | 7.9 | 7,498 | 6.5 | 82,952 | 8.2 | 26,846 | 7.5 | 0(•) | 0.0(•) |
| Married, no child....... | 304,471 | 20.5 | 25,367 | 22.0 | 195,456 | 19.3 | 83,648 | 23.3 | 0(•) | 0.0(•) |
| Married, child status unknown | 3,856 | 0.3 | 416(•) | 0.4(•) | 2,157 | 0.2 | 1,283(•) | 0.4(•) | 0(•) | 0.0(•) |
| Never married.. | 230,261 | 15.5 | 9,991 | 8.7 | 185,194 | 18.3 | 35,077 | 9.8 | 0(•) | 0.0(•) |
| Widowed, divorced separated... | 234,380 | 15.8 | 24,088 | 20.9 | 153,074 | 15.1 | 57,150 | 15.9 | 67(•) | 32.3(•) |
| Unknown........ | 13,351 | 0.9 | 1,533 | 1.3 | 8,585 | 0.8 | 3,233 | 0.9 | 0(•) | 0.0(•) |

(continued)

Table D-3. (continued).

| Marital status and age of children | Total |  | Employment setting |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Nursing home |  | Hospital |  | Other |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 7,157 | 0.0 | 2,791 | 0.0 | 8,881 | 0.0 | 4,519 | 0.0 | 118 | 0.0 |
| Married |  |  |  |  |  |  |  |  |  |  |
| Married, child-less than 6 | 4,938 | 0.3077 | 943 | 0.8319 | 3,874 | 0.3302 | 1,598 | 0.4518 | 104 | 25.2816 |
| Married, child 6 or older.. | 6,776 | 0.4148 | 1,419 | 1.0876 | 4,563 | 0.4015 | 3,105 | 0.6282 | 0 | 0.0 |
| Married, children less than 6 and 6 or older.. | 3,483 | 0.2210 | 822 | 0.7571 | 2,977 | 0.2689 | 1,424 | 0.4177 | 0 | 0.0 |
| Married, no child....... | 5,646 | 0.4091 | 1,427 | 1.1120 | 4,506 | 0.4589 | 3,040 | 0.7466 | 0 | 0.0 |
| Married, child status unknown | 525 | 0.0350 | 176 | 0.1532 | 469 | 0.0458 | 274 | 0.0774 | 0 | 0.0 |
| Never married.. | 3,953 | 0.2661 | 1029 | 0.8621 | 3,352 | 0.2936 | 1,638 | 0.4920 | 0 | 0.0 |
| Widowed, divorced separated... | 4,901 | 0.3306 | 1,810 | 1.2676 | 3,737 | 0.3449 | 2,560 | 0.6625 | 53 | 25.2816 |
| Unknown........ | 773 | 0.0516 | 279 | 0.2486 | 685 | 0.0661 | 449 | 0.1252 | 0 | 0.0 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-4. Estimated number and percent of registered nurses by employment setting and years since graduation.

| Years since graduation | Total |  | Employment setting: Nursing home |  | Hospital |  | Other |  | Unknown |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.. | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,965 | 100.0 | 358,486 | 100.0 | 207(*) | 100.0(*) |
| Under 5 years. | 251,059 | 16.9 | 12,246 | 10.6 | 215,676 | 21.3 | 23,027 | 6.4 | 107(*) | 51.7(*) |
| 5 to 9 years.. | 334,810 | 22.5 | 14,369 | 12.5 | 263,809 | 26.1 | 56,546 | 15.8 | 85(*) | 41.2(*) |
| 10 to 14 years | 248,030 | 16.7 | 12,653 | 11.0 | 176,989 | 17.5 | 58,387 | 16.3 | 0(*) | 0.0(*) |
| 15 or more years | 642,602 | 43.3 | 75,032 | 65.2 | 349,710 | 34.6 | 217,845 | 60.8 | 15(*) | 7.2(*) |
| Unknown....... | 9,224 | 0.6 | 776(*) | 0.7(*) | 5,767 | 0.6 | 2,681 | 0.7 | 0(*) | 0.0(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total... | 7,157 | 0.0 | 2,791 | 0.0 | 8,681 | 0.0 | 4,519 | 0.0 | 118 | 0.0 |
| Under 5 years. | 5,381 | 0.3538 | 798 | 0.7053 | 4,517 | 0.3848 | 1,303 | 0.3983 | 99 | 24.6298 |
| 5 to 9 years.. | 7,488 | 0.4573 | 1,033 | 0.8708 | 5,963 | 0.5029 | 2,649 | 0.7572 | 83 | 25.2657 |
| 10 to 14 years | 4,822 | 0.2799 | 747 | 0.6025 | 4,108 | 0.3485 | 2,035 | 0.5246 | 0 | 0.0 |
| 15 or more years | 8,920 | 0.6551 | 2,670 | 1.3604 | 5,733 | 0.5916 | 5,277 | 1.0057 | 14 | 6.7916 |
| Unknown....... | 691 | 0.0463 | 256 | 0.2283 | 611 | 0.0617 | 394 | 0.1106 | 0 | 0.0 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table D-5. Estimated number and percent of registered nurses by employment setting and highest educational preparation.

| Highest educational preparation | Total |  | Employment setting |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Nursing home |  | Hospital |  | Other |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(•) | 100.0(•) |
| Associate Degree...... | 372,572 | 25.1 | 24,901 | 21.6 | 288,089 | 28.5 | 59,567 | 16.6 | 15(•) | 7.2(•) |
| Diploma....... | 620,350 | 41.8 | 68,493 | 59.5 | 399,873 | 39.5 | 151,983 | 42.4 | 0(•) | 0.0(•) |
| Baccalaureate in nursing.. | 355,340 | 23.9 | 14,500 | 12.6 | 257,150 | 25.4 | 83,499 | 23.3 | 192(•) | 92.8(•) |
| Other baccalaureate, masters, and doctorates.. | 130,969 | 8.8 | 6,034 | 5.2 | 63,464 | 6.3 | 61,471 | 17.1 |  |  |
| Unknown....... | 6,495 | 0.4 | 1,149(•) | 1.0(•) | 3,379 | 0.3 | 1,967 | 0.5 | 0(•) | 0.0(•) |

(continued)

Table D-5. (continued).

| Highest educational preparation | Total |  | Employment setting |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Nursing home |  | Hospital |  | Other |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Standard errors |  |  |  |  |  |  |  |  |  |  |
| Total.... | 7,157 | 0.0 | 2,411 | 0.0 | 8,482 | 0.0 | 4,766 | 0.0 | 118 | 0.0 |
| Associate Degree...... | 5,312 | 0.3147 | 1,480 | 1.2461 | 4,088 | 0.3837 | 2,074 | 0.6168 | 14 | 6.7916 |
| Diploma....... | 6,042 | 0.3616 | 2,434 | 1.2242 | 5,672 | 0.4125 | 3,707 | 0.7075 | 0 | 0.0 |
| Baccalaureate in nursing.. | 5,779 | 0.3537 | 965 | 0.8791 | 5,293 | 0.4226 | 2,047 | 0.5940 | 117 | 6.7916 |
| Other, baccalaureate, masters, and doctorates.. | 3,855 | 0.2708 | 854 | 0.7032 | 2,200 | 0.2257 | 2,569 | 0.6398 | 0 | 0.0 |
| Unknown....... | 669 | 0.0454 | 342 | 0.3004 | 460 | 0.0454 | 450 | 0.1249 | 0 | 0.0 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-6. Estimated number and percent of registered nurses by employment setting and work schedule.

| Work schedule | Total |  | Employment setting |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Nursing home |  | Hospital |  | Other |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Estimates |  |  |  |  |  |  |  |  |  |  |
| Total... | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(•) | 100.0(•) |
| Full-time.... | 984,330 | 66.3 | 68,102 | 59.2 | 689,637 | 68.1 | 226,417 | 63.2 | 174(•) | 84.0(•) |
| Part-time.... | 431,624 | 29.1 | 40,107 | 34.9 | 289,580 | 28.6 | 101,903 | 28.4 | 33(•) | 16.0(•) |
| Part-time, part year.. | 69,467 | 4.7 | 6,840 | 5.9 | 32,468 | 3.2 | 30,159 | 8.4 | 0(•) | 0.0(•) |
| Unknown...... | 304(•) | 0.0(•) | 27(•) | 0.0(•) | 270(•) | 0.0(•) | 7(•) | 0.0(•) | 0(•) | 0.0(•) |
| Standard errors |  |  |  |  |  |  |  |  |  |  |
| Total... | 7,157 | 0.0 | 2,791 | 0.0 | 8,681 | 0.0 | 4,519 | 0.0 | 118 | 0.0 |
| Full-time.... | 8,862 | 0.4594 | 2,715 | 1.6832 | 9,709 | 0.6146 | 3,704 | 0.6070 | 113 | 13.8932 |
| Part-time.... | 6,599 | 0.4584 | 1,892 | 1.4935 | 5,257 | 0.5655 | 2,470 | 0.5894 | 34 | 13.8932 |
| Part-time, part year.. | 2,861 | 0.1827 | 805 | 0.7072 | 1,898 | 0.1716 | 1,545 | 0.4547 | 0 | 0.0 |
| Unknown...... | 149 | 0.0100 | 28 | 0.0244 | 146 | 0.0144 | 7 | 0.0020 | 0 | 0.0 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-7. Estimated number and percent of registered nurses by employment setting and other place of employment.

| Other place of employment | Total | | Employment setting | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Nursing home | | Hospital | | Other | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 1,485,726 | 100.0 | 115,077 | 100.0 | 1,011,956 | 100.0 | 358,486 | 100.0 | 207(•) | 100.0(•) |
| None.......... | 1,331,612 | 89.6 | 106,978 | 93.0 | 919,644 | 90.9 | 304,783 | 85.0 | 207(•) | 100.0(•) |
| Hospital...... | 48,294 | 3.3 | 1,750 | 1.5 | 25,787 | 2.5 | 20,757 | 5.8 | 0(•) | 0.0(•) |
| Other setting. | 105,593 | 7.1 | 6,321 | 5.5 | 66,332 | 6.6 | 32,939 | 9.2 | 0(•) | 0.0(•) |
| Unknown....... | 227(•) | 0.0(•) | 27(•) | 0.0(•) | 192(•) | 0.0(•) | 7(•) | 0.0(•) | 0(•) | 0.0(•) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 7,157 | 0.0 | 2,791 | 0.0 | 8,681 | 0.0 | 4,519 | 0.0 | 118 | 0.0 |
| None.......... | 7,123 | 0.2315 | 2,815 | 0.5861 | 8,611 | 0.2768 | 4,427 | 0.4317 | 118 | 0.0 |
| Hospital...... | 2,183 | 0.1454 | 387 | 0.3272 | 1,226 | 0.1234 | 1,533 | 0.4181 | 0 | 0.0 |
| Other setting. | 3,048 | 0.2014 | 702 | 0.6387 | 2,676 | 0.2585 | 1,284 | 0.3749 | 0 | 0.0 |
| Unknown....... | 122 | 0.0082 | 28 | 0.0244 | 119 | 0.0117 | 7 | 0.0020 | 0 | 0.0 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-8. Estimated number and percent of full-time registered nurses by employment setting and weekly salary.

| Weekly salary | Total |  | Employment setting |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Nursing home |  | Hospital |  | Other |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Estimates |  |  |  |  |  |  |  |  |  |  |
| Total..... | 984,330 | 100.0 | 68,102 | 100.0 | 689,637 | 100.0 | 226,417 | 100.0 | 174(•) | 100.0(•) |
| Under $300.00.. | 63,027 | 6.4 | 10,808 | 15.9 | 20,110 | 2.9 | 32,109 | 14.2 | 0(•) | 0.0(•) |
| $300.00-$399.99 | 251,035 | 25.5 | 26,444 | 38.8 | 158,015 | 22.9 | 66,596 | 29.4 | 0(•) | 0.0(•) |
| $400.00-$499.99 | 356,442 | 36.2 | 16,763 | 24.6 | 275,872 | 40.0 | 63,791 | 28.2 | 15(•) | 8.5(•) |
| $500.00 & above | 266,889 | 27.1 | 9,192 | 13.5 | 204,822 | 29.7 | 52,855 | 23.3 | 0(•) | 0.0(•) |
| Unknown........ | 46,957 | 4.8 | 4,895 | 7.2 | 30,818 | 4.5 | 11,085 | 4.9 | 159(•) | 91.5(•) |
| Standard errors |  |  |  |  |  |  |  |  |  |  |
| Total..... | 8,662 | 0.0 | 2,715 | 0.0 | 9,709 | 0.0 | 3,704 | 0.0 | 113 | 0.0 |
| Under $300.00.. | 1,600 | 0.1811 | 1,032 | 1.2577 | 1,030 | 0.1643 | 1,121 | 0.4820 | 0 | 0.0 |
| $300.00-$399.99 | 3,384 | 0.3638 | 1,360 | 1.6241 | 2,561 | 0.4155 | 1,900 | 0.7685 | 0 | 0.0 |
| $400.00-$499.99 | 5,896 | 0.4245 | 1,319 | 1.8184 | 6,496 | 0.5225 | 2,404 | 0.8870 | 14 | 8.1653 |
| $500.00 & above | 5,208 | 0.3914 | 1,074 | 1.4189 | 4,919 | 0.5146 | 1,974 | 0.7754 | 0 | 0.0 |
| Unknown........ | 2000 | 0.2068 | 662 | 0.8746 | 1,582 | 0.2331 | 866 | 0.3624 | 111 | 8 1653 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 and were considered full-time employees.

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table D-9. Estimated number and percent of registered nurses by employment setting and position.

| Position | Total | | Employment setting | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Nursing home | | Hospital | | Other | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total... | 1,485,725 | 100.0 | 115,077 | 100.0 | 1,011,955 | 100.0 | 358,486 | 100.0 | 207(•) | 100.0(•) |
| Staff, general duty, or specialty nurse...... | 1,068,557 | 71.9 | 59,226 | 51.5 | 790,007 | 78.1 | 219,276 | 61.2 | 48(•) | 23.2(•) |
| Administrative Supervisory or head nurse | 260,778 | 17.6 | 47,666 | 41.4 | 164,231 | 16.2 | 48,774 | 13.6 | 107(•) | 51.7(•) |
| Other........ | 156,297 | 10.5 | 8,185 | 7.1 | 57,676 | 5.7 | 90,436 | 25.2 | 0(•) | 0.0(•) |
| Unknown...... | 93(•) | 0.0(•) | 0(•) | 0.0(•) | 41(•) | 0.0(•) | 0(•) | 0.0(•) | 52(•) | 25.1(•) |
| **Standard errors** | | | | | | | | | | |
| Total... | 7,157 | 0.0 | 2,791 | 0.0 | 8,681 | 0.0 | 4,519 | 0.0 | 118 | 0.0 |
| Staff, general duty, or speciality nurse | 8,826 | 0.4902 | 1,935 | 1.2880 | 8,969 | 0.4324 | 3,517 | 0.6877 | 37 | 15.6359 |
| Administrative, supervisory or head nurse.. | 5,389 | 0.3421 | 1,762 | 1.0167 | 4,422 | 0.4213 | 2,013 | 0.4741 | 99 | 24.6298 |
| Other......... | 3,260 | 0.2440 | 821 | 0.6915 | 2,316 | 0.2423 | 2,801 | 0.7616 | 0 | 0.0 |
| Unknown...... | 42 | 0.0028 | 0 | 0.0 | 28 | 0.0028 | 0 | 0.0 | 51 | 26.0042 |

SOURCE: 1984 National Sample Survey of Registered Nurses.

POPULATION: RNs employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-10. Frequency with which RNs are involved in activities commonly performed in nursing homes.

| Activities | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Administer routine therapies | 53,063 | 53.2 | 13,747 | 13.8 | 6,602 | 6.5 | 19,174 | 19.2 | 6,048 | 6.1 | 1,073 | 1.1 |
| Administer complex therapies | 26,172 | 26.2 | 22,808 | 22.9 | 18,206 | 18.3 | 24,085 | 24.2 | 7,324 | 7.3 | 1,113 | 1.1 |
| Giving personal care | 11,890 | 11.9 | 15,265 | 15.3 | 17,674 | 17.7 | 43,241 | 43.4 | 10,554 | 10.6 | 1,083 | 1.1 |
| Observing and charting | 62,775 | 63.0 | 18,012 | 18.1 | 7,104 | 7.1 | 8,238 | 8.3 | 2,578 | 2.6 | 1,002 | 1.0 |
| Teaching and counseling patients | 19,408 | 19.5 | 26,997 | 27.1 | 20,519 | 20.6 | 26,610 | 26.7 | 5,207 | 5.2 | 967 | 1.0 |
| Determining patient care plans | 46,738 | 46.9 | 29,786 | 29.9 | 10,800 | 10.8 | 8,806 | 8.8 | 2,738 | 2.7 | 841(*) | 0.2(*) |
| Evaluating and modifying care plans | 36,987 | 37.1 | 29,116 | 29.2 | 14,189 | 14.2 | 13,206 | 13.2 | 5,138 | 5.2 | 1,072 | 1.1 |
| Assigning and supervising nursing staff | 64,138 | 64.3 | 20,007 | 20.1 | 4,922 | 4.9 | 6,077 | 6.1 | 3,713 | 3.7 | 849 | 0.9 |
| Planning and providing diversion | 2,169 | 2.2 | 7,172 | 7.2 | 14,253 | 14.3 | 37,983 | 38.1 | 36,839 | 36.9 | 1,292 | 1.3 |
| **Standard errors** | | | | | | | | | | | | |
| Administer routine therapies | 2,303 | 1.2 | 887 | 0.8 | 670 | 0.6 | 913 | 0.9 | 664 | 0.6 | 233 | 0.2 |
| Administer complex therapies | 1,705 | 1.3 | 1,170 | 1.0 | 1,166 | 1.0 | 1,229 | 1.1 | 737 | 0.7 | 234 | 0.2 |
| Giving personal care | 1,342 | 1.2 | 1,067 | 1.0 | 1,099 | 0.9 | 1,662 | 1.4 | 731 | 0.7 | 210 | 0.2 |
| Observing and charting | 2,675 | 1.2 | 936 | 0.9 | 601 | 0.6 | 591 | 0.6 | 453 | 0.4 | 216 | 0.2 |
| Teaching and counseling patients | 1,631 | 1.3 | 1,262 | 1.1 | 1,153 | 1.0 | 1,296 | 1.1 | 540 | 0.5 | 197 | 0.2 |
| Determining patient care plans | 2,092 | 1.4 | 1,406 | 1.1 | 833 | 0.8 | 721 | 0.7 | 380 | 0.4 | 207 | 0.2 |
| Evaluating and modifying care plans | 1,698 | 1.2 | 1,340 | 1.1 | 1,074 | 0.9 | 919 | 0.8 | 644 | 0.6 | 234 | 0.2 |
| Assigning and supervising nursing staff | 2,340 | 1.3 | 1,234 | 1.1 | 536 | 0.5 | 813 | 0.8 | 519 | 0.5 | 207 | 0.2 |
| Planning and providing diversion | 353 | 0.4 | 799 | 0.7 | 1,208 | 1.1 | 1,696 | 1.3 | 1,597 | 1.3 | 265 | 0.3 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-11. Frequency of nurse involvement with administering routine therapies by years of nursing experience and highest educational preparation.

|  | Frequency of involvement |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Always |  | Very often |  | As often as not |  | Seldom |  | Never |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 53,083 | 53.2 | 13,747 | 13.8 | 6,602 | 6.6 | 19,174 | 19.2 | 6,048 | 6.1 | 1,073 | 1.1 |
| **Years of nursing experience** |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years....... | 10,738 | 66.9 | 2,400 | 14.0 | 834 | 5.2 | 1,835 | 11.4 | 193(*) | 1.2(*) | 41(*) | 0.3(*) |
| 5-9 years............... | 7,174 | 51.0 | 2,296 | 16.3 | 1,192 | 8.5 | 2,789 | 19.8 | 546(*) | 3.9(*) | 58(*) | 0.4(*) |
| 10-19 years............. | 16,861 | 51.6 | 4,079 | 12.5 | 1,865 | 5.7 | 7,103 | 21.8 | 2,515 | 7.7 | 226(*) | 0.7(*) |
| 20-29 years............. | 11,112 | 48.9 | 3,202 | 14.1 | 1,868 | 8.2 | 4,587 | 20.2 | 1,741 | 7.7 | 195(*) | 0.9(*) |
| 30 or more years........ | 6,760 | 50.6 | 1,520 | 11.4 | 786(*) | 5.9(*) | 2,715 | 20.3 | 1,044 | 7.8 | 545(*) | 4.1(*) |
| Unknown................. | 417(*) | 47.0(*) | 250(*) | 28.2(*) | 57(*) | 6.5(*) | 146(*) | 16.4(*) | 9(*) | 1.0(*) | 9(*) | 1.0(*) |
| **Highest educational preparation** |  |  |  |  |  |  |  |  |  |  |  |  |
| Associate degree........ | 12,116 | 55.5 | 4,231 | 19.4 | 1,511 | 6.9 | 3,259 | 14.9 | 542(*) | 2.5(*) | 185(*) | 0.8(*) |
| Diploma................. | 31,176 | 54.9 | 7,519 | 13.2 | 3,359 | 5.9 | 10,583 | 18.6 | 3,437 | 6.0 | 740(*) | 1.3(*) |
| Baccalaureate in nursing................ | 8,727 | 50.7 | 1,562 | 11.8 | 1,121 | 8.4 | 3,073 | 23.1 | 700(*) | 1.5(*) | 97(*) | 0.7(*) |
| Baccalaureate in related area, masters or doctorate............. | 2,781 | 38.5 | 364(*) | 5.0(*) | 579(*) | 8.0(*) | 2,124 | 29.4 | 1,337 | 18.5 | 42(*) | 0.6(*) |
| Unknown................. | 263(*) | 48.6(*) | 72(*) | 13.3(*) | 32(*) | 5.9(*) | 135(*) | 24.9(*) | 31(*) | 5.8(*) | 9(*) | 1.6(*) |

(continued)

Table D-11. (Continued).

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | | | |
| Total............... | 2,303 | 1.2 | 887 | 0.8 | 670 | 0.6 | 913 | 0.9 | 664 | 0.6 | 233 | 0.2 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years........ | 869 | 2.8 | 358 | 2.1 | 160 | 1.0 | 275 | 1.7 | 72 | 0.5 | 31 | 0.2 |
| 5-9 years................ | 679 | 3.1 | 391 | 2.5 | 213 | 1.5 | 342 | 2.2 | 158 | 1.1 | 46 | 0.3 |
| 10-19 years.............. | 1,223 | 2.3 | 468 | 1.3 | 341 | 1.0 | 596 | 1.7 | 465 | 1.4 | 89 | 0.3 |
| 20-29 years.............. | 1,000 | 2.7 | 436 | 1.8 | 463 | 1.8 | 457 | 2.0 | 391 | 1.6 | 84 | 0.4 |
| 30 or more years......... | 644 | 3.3 | 243 | 1.6 | 194 | 1.4 | 384 | 2.6 | 217 | 1.6 | 192 | 1.4 |
| Unknown.................. | 159 | 12.3 | 125 | 11.6 | 44 | 4.8 | 61 | 6.9 | 9 | 1.0 | 9 | 1.0 |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associated degree........ | 1,007 | 2.6 | 488 | 2.1 | 213 | 1.0 | 328 | 1.5 | 142 | 0.6 | 82 | 0.4 |
| Diploma.................. | 1,760 | 1.7 | 679 | 1.1 | 447 | 0.8 | 707 | 1.2 | 493 | 0.9 | 210 | 0.4 |
| Baccalaureate in nursing................. | 717 | 3.6 | 317 | 2.2 | 422 | 3.0 | 380 | 2.7 | 197 | 1.5 | 52 | 0.4 |
| Baccalaureate in related area masters or doctorate............... | 432 | 4.8 | 111 | 1.5 | 171 | 2.2 | 375 | 4.5 | 394 | 4.6 | 31 | 0.4 |
| Unknown.................. | 117 | 14.3 | 72 | 12.0 | 32 | 5.8 | 54 | 10.0 | 23 | 4.2 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table D-12. Frequency of nurse involvement with administering complex therapies by years of nursing experience and highest educational preparation.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total.............. | 26,172 | 26.2 | 22,808 | 22.9 | 18,205 | 18.3 | 24,085 | 24.2 | 7,324 | 7.3 | 1,113 | 1.1 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years....... | 4,415 | 27.5 | 4,275 | 26.7 | 3,929 | 24.5 | 2,804 | 17.5 | 566(•) | 3.5(•) | 52(•) | 0.3(•) |
| 5-9 years............... | 2,979 | 21.2 | 3,463 | 24.6 | 2,928 | 20.8 | 3,709 | 26.4 | 884 | 6.3 | 91(•) | 0.6(•) |
| 10-19 years............. | 8,996 | 27.6 | 7,035 | 21.5 | 5,782 | 17.7 | 7,782 | 23.8 | 2,704 | 8.3 | 351(•) | 1.1(•) |
| 20-29 years............. | 6,362 | 28.0 | 4,798 | 21.1 | 3,378 | 14.9 | 6,135 | 27.0 | 1,843 | 8.1 | 188(•) | 0.8(•) |
| 30 or more years........ | 3,339 | 25.0 | 3,075 | 23.0 | 1,965 | 14.7 | 3,428 | 25.6 | 1,319 | 9.9 | 244(•) | 1.8(•) |
| Unknown................. | 80(•) | 9.0(•) | 161(•) | 18.2(•) | 222(•) | 25.1(•) | 228(•) | 25.7(•) | 9(•) | 1.0(•) | 187(•) | 21.1(•) |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree........ | 4,986 | 22.8 | 5,782 | 26.5 | 5,153 | 23.6 | 4,793 | 21.9 | 965 | 4.4 | 164(•) | 0.8(•) |
| Diploma................. | 16,384 | 28.8 | 12,729 | 22.4 | 9,444 | 16.6 | 13,912 | 24.5 | 3,656 | 6.4 | 690(•) | 1.2(•) |
| Baccalaureate in nursing................ | 3,224 | 24.3 | 2,715 | 20.4 | 2,926 | 22.0 | 3,173 | 23.9 | 1,088 | 8.2 | 155(•) | 1.2(•) |
| Baccalaureate in related area, masters or doctorate.............. | 1,326 | 18.3 | 1,481 | 20.5 | 627(•) | 8.7(•) | 2,114 | 29.3 | 1,583 | 21.9 | 96(•) | 1.3(•) |
| Unknown................. | 252(•) | 46.6(•) | 100(•) | 18.5(•) | 56(•) | 10.3(•) | 93(•) | 17.2(•) | 31(•) | 5.8(•) | 9(•) | 1.6(•) |

(continued)

Table D-12. (Continued).

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | | | |
| Total............... | 1,705 | 1.3 | 1,170 | 1.0 | 1,156 | 1.0 | 1,229 | 1.1 | 737 | 7.3 | 234 | 0.2 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years........ | 503 | 2.7 | 476 | 2.5 | 573 | 2.9 | 330 | 2.0 | 172 | 3.5 | 33 | 0.2 |
| 5-9 years................ | 400 | 2.5 | 458 | 2.8 | 425 | 2.7 | 480 | 2.9 | 222 | 6.3 | 49 | 0.3 |
| 10-19 years.............. | 942 | 2.3 | 626 | 1.7 | 598 | 1.7 | 704 | 1.9 | 467 | 8.3 | 129 | 0.4 |
| 20-29 years.............. | 764 | 2.6 | 508 | 2.1 | 582 | 2.1 | 659 | 2.6 | 341 | 6.1 | 84 | 0.4 |
| 30 or more years......... | 449 | 2.9 | 392 | 2.6 | 302 | 2.1 | 449 | 2.8 | 267 | 9.9 | 104 | 0.8 |
| Unknown.................. | 55 | 6.1 | 69 | 7.6 | 123 | 11.6 | 89 | 9.4 | 9 | 1.0 | 127 | 12.0 |
| **Highest educational preparation** | | | | | | | | | | | | |
| Total............... | 1,705 | 1.3 | 1,170 | 1.0 | 1,156 | 1.0 | 1,229 | 1.1 | 737 | 0.7 | 234 | 0.2 |
| Associate degree......... | 628 | 2.4 | 555 | 2.2 | 628 | 2.4 | 470 | 2.0 | 195 | 0.9 | 79 | 0.4 |
| Diploma.................. | 1,271 | 1.8 | 855 | 1.3 | 768 | 1.2 | 983 | 1.5 | 522 | 0.9 | 202 | 0.4 |
| Baccalaureate in nursing................. | 532 | 3.4 | 425 | 2.9 | 552 | 3.5 | 450 | 3.1 | 231 | 1.7 | 67 | 0.5 |
| Baccalaureate in related area, masters or doctorate | 291 | 3.7 | 329 | 4.0 | 158 | 2.2 | 366 | 4.4 | 414 | 4.7 | 62 | 0.9 |
| Unknown.................. | 124 | 14.5 | 62 | 10.5 | 40 | 7.2 | 45 | 8.3 | 23 | 4.2 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-13. Frequency of nurse involvement with giving personal care by years of nursing experience and highest educational preparation.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total | 11,890 | 11.9 | 15,265 | 15.3 | 17,674 | 17.7 | 43,241 | 43.4 | 10,554 | 10.6 | 1,083 | 1.1 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years | 2,001 | 12.5 | 2,197 | 13.7 | 3,641 | 22.7 | 7,288 | 45.4 | 853 | 5.3 | 63(*) | 0.4(*) |
| 5-9 years | 1,336 | 9.5 | 2,643 | 18.8 | 2,767 | 19.7 | 5,975 | 42.5 | 1,263 | 9.0 | 69(*) | 0.5(*) |
| 10-19 years | 4,189 | 12.8 | 4,945 | 15.1 | 5,122 | 15.7 | 14,205 | 43.5 | 3,870 | 11.9 | 319(*) | 1.0(*) |
| 20-29 years | 2,466 | 10.9 | 3,082 | 13.6 | 4,041 | 17.8 | 10,503 | 46.3 | 2,364 | 10.4 | 249(*) | 1.1(*) |
| 30 or more years | 1,665 | 12.5 | 2,245 | 16.8 | 1,928 | 14.4 | 4,987 | 37.3 | 2,169 | 16.2 | 375(*) | 2.8(*) |
| Unknown | 232(*) | 26.2(*) | 154(*) | 17.4(*) | 174(*) | 19.7(*) | 282(*) | 31.8(*) | 36(*) | 4.0(*) | 9(*) | 1.5(*) |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree | 2,522 | 11.5 | 2,935 | 13.4 | 4,201 | 19.2 | 10,279 | 47.1 | 1,711 | 7.8 | 195(*) | 0.9(*) |
| Diploma | 6,938 | 12.2 | 9,700 | 17.1 | 9,748 | 17.2 | 23,653 | 41.6 | 6,028 | 10.6 | 748(*) | 1.3(*) |
| Baccalaureate in nursing | 1,736 | 13.1 | 1,819 | 13.7 | 2,498 | 18.8 | 5,980 | 45.0 | 1,157 | 8.7 | 90(*) | 0.7(*) |
| Baccalaureate in related area, masters or doctorate | 622(*) | 8.6(*) | 687(*) | 9.5(*) | 1,087(*) | 15.0(*) | 3,157 | 43.7 | 1,622 | 22.6 | 42(*) | 0.6(*) |
| Unknown | 72(*) | 13.3(*) | 124(*) | 22.9(*) | 140(*) | 25.8(*) | 172(*) | 31.8(*) | 26(*) | 4.7(*) | 9(*) | 1.6(*) |

(continued)

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Table D-13. (Continued).

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | | | |
| Total | 1,342 | 1.2 | 1,067 | 1.0 | 1,099 | 0.9 | 1,662 | 1.4 | 731 | 0.7 | 210 | 0.2 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years | 359 | 2.1 | 327 | 1.9 | 428 | 2.4 | 699 | 3.1 | 168 | 1.0 | 38 | 0.2 |
| 5-9 years | 286 | 1.9 | 392 | 2.5 | 439 | 2.7 | 584 | 3.1 | 199 | 1.4 | 57 | 0.4 |
| 10-19 years | 803 | 2.2 | 648 | 1.7 | 537 | 1.5 | 904 | 2.3 | 514 | 1.5 | 123 | 0.4 |
| 20-29 years | 593 | 2.3 | 426 | 1.8 | 620 | 2.2 | 797 | 3.0 | 366 | 1.6 | 95 | 0.4 |
| 30 or more years | 347 | 2.4 | 346 | 2.3 | 314 | 2.1 | 501 | 3.0 | 331 | 2.3 | 119 | 0.9 |
| Unknown | 134 | 12.2 | 72 | 7.9 | 81 | 8.7 | 129 | 11.7 | 23 | 2.7 | 9 | 1.0 |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associated degree | 529 | 2.2 | 407 | 1.7 | 464 | 1.9 | 765 | 2.6 | 244 | 1.1 | 83 | 0.9 |
| Diploma | 916 | 1.4 | 848 | 1.3 | 790 | 1.2 | 1,190 | 1.6 | 565 | 1.0 | 184 | 1.3 |
| Baccalaureate in nursing | 446 | 3.0 | 318 | 2.2 | 562 | 3.6 | 599 | 3.8 | 204 | 1.6 | 49 | 0.7 |
| Baccalaureate in related area, masters or doctorate | 195 | 2.6 | 206 | 2.8 | 294 | 3.6 | 460 | 4.8 | 394 | 4.7 | 31 | 0.4 |
| Unknown | 72 | 12.0 | 84 | 13.1 | 76 | 12.1 | 72 | 12.1 | 20 | 3.8 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table D-14. Frequency of nurse involvement with observing and charting patients by years of nursing experience and highest educational preparation.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total.............. | 62,775 | 63.0 | 18,012 | 18.1 | 7,104 | 7.1 | 8,236 | 8.3 | 2,578 | 2.6 | 1,002 | 1.0 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years....... | 12,309 | 76.7 | 2,471 | 15.4 | 682 | 4.3 | 418(•) | 2.6(•) | 121(•) | 0.8(•) | 41(•) | 0.3(•) |
| 5-9 years................ | 8,494 | 60.4 | 3,222 | 22.9 | 1,443 | 10.3 | 739 | 5.3 | 124(•) | 0.9(•) | 33(•) | 0.2(•) |
| 10-19 years............. | 19,561 | 59.9 | 5,442 | 16.7 | 3,117 | 9.5 | 3,142 | 9.6 | 1,140(•) | 3.5(•) | 249(•) | 0.8(•) |
| 20-29 years............. | 13,935 | 61.4 | 4,271 | 18.8 | 1,212 | 5.3 | 2,379 | 10.5 | 746(•) | 3.3(•) | 163(•) | 0.7(•) |
| 30 or more years........ | 7,952 | 59.5 | 2,529 | 18.9 | 533(•) | 4.0(•) | 1,507 | 11.3 | 448(•) | 3.3(•) | 402(•) | 3.0(•) |
| Unknown.................. | 525(•) | 59.1(•) | 79(•) | 8.9(•) | 118(•) | 13.3(•) | 52(•) | 5.9(•) | 0(•) | 0.0(•) | 114(•) | 12.9(•) |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associated degree....... | 14,514 | 66.4 | 4,538 | 20.8 | 1,272 | 5.8 | 1,264 | 5.8 | 139(•) | 0.6(•) | 116(•) | 0.5(•) |
| Diploma.................. | 36,404 | 64.1 | 9,877 | 17.4 | 3,827 | 6.7 | 4,468 | 7.9 | 1,542 | 2.7 | 697(•) | 1.2(•) |
| Baccalaureate in nursing................ | 8,149 | 61.4 | 2,112 | 15.9 | 1,393 | 10.5 | 1,265 | 9.5 | 244(•) | 1.8(•) | 119(•) | 0.9(•) |
| Baccalaureate in related area, masters or doctorate.............. | 3,407 | 47.2 | 1,366 | 18.9 | 562(•) | 7.8(•) | 1,880 | 16.3 | 652(•) | 9.0(•) | 61(•) | 0.8(•) |
| Unknown.................. | 301(•) | 55.7(•) | 120(•) | 22.2(•) | 51(•) | 9.4(•) | 60(•) | 11.1(•) | 0(•) | 0.0(•) | 9(•) | 1.6(•) |

(continued)

Table D-14. (Continued).

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Standard errors | | | | | | | | | | | | |
| Total | 2,675 | 1.2 | 938 | 0.9 | 601 | 0.8 | 591 | 0.6 | 453 | 0.4 | 216 | 0.2 |
| Years of nursing experience | | | | | | | | | | | | |
| Less than 5 years | 927 | 2.2 | 308 | 1.9 | 156 | 1.0 | 111 | 0.7 | 64 | 0.4 | 31 | 0.2 |
| 5-9 years | 733 | 2.9 | 403 | 2.6 | 273 | 1.8 | 162 | 1.1 | 54 | 0.4 | 19 | 0.1 |
| 10-19 years | 1,331 | 2.2 | 522 | 1.6 | 420 | 1.2 | 416 | 1.2 | 337 | 1.0 | 91 | 0.3 |
| 20-29 years | 1,276 | 3.0 | 529 | 2.2 | 223 | 1.0 | 300 | 1.3 | 245 | 1.1 | 80 | 0.4 |
| 30 or more years | 693 | 3.0 | 330 | 2.3 | 141 | 1.0 | 290 | 2.0 | 137 | 1.0 | 156 | 1.1 |
| Unknown | 180 | 11.5 | 41 | 4.7 | 63 | 6.9 | 28 | 3.3 | 0 | 0.0 | 88 | 9.1 |
| Highest educational preparation | | | | | | | | | | | | |
| Associated degree | 1,051 | 2.2 | 443 | 1.9 | 199 | 0.9 | 208 | 1.0 | 73 | 0.3 | 69 | 0.3 |
| Diploma | 1,899 | 1.6 | 739 | 1.2 | 451 | 0.8 | 433 | 0.7 | 331 | 0.6 | 196 | 0.3 |
| Baccalaureate in nursing | 884 | 3.4 | 293 | 2.2 | 282 | 2.0 | 264 | 1.9 | 94 | 0.7 | 56 | 0.4 |
| Baccalaureate in related area, masters or doctorate | 484 | 4.9 | 307 | 3.7 | 160 | 2.2 | 292 | 3.8 | 295 | 3.8 | 34 | 0.5 |
| Unknown | 128 | 13.6 | 69 | 11.4 | 37 | 6.7 | 32 | 6.0 | 0 | 0.0 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table D-15. Frequency of nurse involvement with teaching and counseling patients by years of nursing experience and highest educational preparation.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total........... | 19,408 | 19.5 | 26,997 | 27.1 | 20,519 | 20.6 | 26,610 | 26.7 | 5,207 | 5.2 | 967 | 1.0 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years.... | 3,126 | 19.5 | 5,146 | 32.1 | 3,460 | 21.6 | 3,847 | 24.0 | 422(•) | 2.6(•) | 41(•) | 0.3(•) |
| 5-9 years............ | 2,408 | 17.1 | 4,114 | 29.3 | 3,643 | 25.9 | 3,388 | 24.1 | 452(•) | 3.2(•) | 48(•) | 0.3(•) |
| 10-19 years.......... | 6,238 | 19.1 | 8,855 | 27.1 | 6,706 | 20.5 | 9,226 | 28.3 | 1,424 | 4.4 | 199(•) | 0.6(•) |
| 20-29 years.... ..... | 4,864 | 21.4 | 5,226 | 23.0 | 4,130 | 18.2 | 6,771 | 29.8 | 1,551 | 6.8 | 163(•) | 0.7(•) |
| 30 or more years..... | 2,591 | 19.4 | 3,319 | 24.8 | 2,377 | 17.8 | 3,303 | 24.7 | 1,358 | 10.2 | 422(•) | 3.2(•) |
| Unknown.............. | 180(•) | 20.3(•) | 336(•) | 37.9(•) | 203(•) | 22.8(•) | 75(•) | 8.4(•) | 0(•) | 0.0(•) | 94(•) | 10.6(•) |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree..... | 3,878 | 17.8 | 7,034 | 32.2 | 4,939 | 22.6 | 5,280 | 24.2 | 575(•) | 2.6(•) | 137(•) | 0.6(•) |
| Diploma.............. | 11,410 | 20.1 | 13,804 | 24.3 | 11,800 | 20.8 | 15,383 | 27.1 | 3,738 | 6.6 | 681(•) | 1.2(•) |
| Baccalaureate in nursing............. | 2,791 | 21.0 | 4,003 | 30.1 | 2,283 | 17.2 | 3,596 | 27.1 | 509(•) | 3.8(•) | 99(•) | 0.7(•) |
| Baccalaureate in related area, masters or doctorate........... | 1,180 | 16.3 | 1,968 | 27.1 | 1,429 | 19.8 | 2,255 | 31.2 | 367(•) | 5.1(•) | 42(•) | 0.6(•) |
| Unknown.............. | 149(•) | 27.5(•) | 201(•) | 37.2(•) | 67(•) | 12.4(•) | 97(•) | 17.9(•) | 19(•) | 3.5(•) | 9(•) | 1.6(•) |

(continued)

Table D-15. (continued).

|  | Frequency of involvement |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Always |  | Very often |  | As often as not |  | Seldom |  | Never |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Standard errors |  |  |  |  |  |  |  |  |  |  |  |  |
| Total........... | 1,631 | 1.3 | 1,262 | 27.1 | 1,153 | 1.0 | 1,298 | 1.1 | 540 | 0.5 | 197 | 0.2 |
| Years of nursing experience |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 years.... | 423 | 2.2 | 572 | 2.7 | 406 | 2.3 | 422 | 2.4 | 131 | 0.8 | 31 | 0.2 |
| 5-9 years............ | 372 | 2.3 | 478 | 2.9 | 459 | 2.8 | 424 | 2.6 | 452 | 0.9 | 28 | 0.2 |
| 10-19 years.......... | 741 | 1.9 | 768 | 1.9 | 665 | 1.8 | 763 | 2.1 | 276 | 0.8 | 81 | 0.3 |
| 20-29 years.......... | 954 | 3.5 | 565 | 2.3 | 524 | 2.1 | 685 | 2.7 | 322 | 1.4 | 80 | 0.4 |
| 30 or more years..... | 396 | 2.6 | 378 | 2.5 | 348 | 2.3 | 417 | 2.7 | 288 | 2.0 | 130 | 1.0 |
| Unknown.............. | 109 | 10.7 | 141 | 12.1 | 75 | 8.4 | 47 | 5.2 | 0 | 0.0 | 85 | 8.9 |
| Highest educational preparation |  |  |  |  |  |  |  |  |  |  |  |  |
| Associate degree..... | 578 | 2.3 | 641 | 2.3 | 492 | 1.9 | 502 | 2.1 | 143 | 0.6 | 72 | 0.3 |
| Diploma.............. | 1,021 | 1.5 | 871 | 1.3 | 948 | 1.4 | 1,025 | 1.5 | 490 | 0.8 | 173 | 0.3 |
| Baccalaureate in nursing............. | 589 | 3.5 | 521 | 3.2 | 350 | 2.5 | 441 | 27.1 | 151 | 1.1 | 53 | 0.4 |
| Baccalaureate in related area, masters or doctorate........... | 238 | 3.1 | 399 | 4.6 | 326 | 4.1 | 455 | 5.0 | 122 | 1.7 | 31 | 0.4 |
| Unknown.............. | 105 | 15.2 | 80 | 13.0 | 41 | 7.4 | 62 | 10.5 | 19 | 3.5 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table D-16. Frequency of nurse involvement with determining patient care plans by years of nursing experience and highest educational preparation.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total............... | 46,738 | 46.9 | 29,786 | 29.9 | 10,800 | 10.8 | 8,805 | 8.8 | 2,738 | 2.7 | 841(•) | 0.8(•) |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years....... | 7,709 | 48.1 | 5,221 | 32.5 | 1,744 | 10.9 | 1,009 | 6.3 | 318(•) | 2.0(•) | 41(•) | 0.3(•) |
| 5-9 years............... | 6,514 | 46.4 | 4,498 | 32.0 | 1,893 | 13.5 | 915 | 6.5 | 223(•) | 1.6(•) | 13(•) | 0.1(•) |
| 10-19 years............. | 16,495 | 50.5 | 9,094 | 27.9 | 3,234 | 9.9 | 3,026 | 9.3 | 737(•) | 2.3(•) | 63(•) | 0.2(•) |
| 20-29 years............. | 10,678 | 47.0 | 6,506 | 28.7 | 2,495 | 11.0 | 2,339 | 10.3 | 484(•) | 2.1(•) | 203(•) | 0.9(•) |
| 30 or more years........ | 4,915 | 36.8 | 4,248 | 31.8 | 1,313 | 9.8 | 1,490 | 11.1 | 976 | 7.3 | 427(•) | 3.2(•) |
| Unknown................. | 427(•) | 48.1(•) | 220(•) | 24.8(•) | 121(•) | 13.7(•) | 26(•) | 2.9(•) | 0(•) | 0.0(•) | 94(•) | 10.6(•) |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree........ | 11,015 | 50.4 | 6,873 | 31.5 | 1,992 | 9.1 | 1,539 | 7.0 | 387(•) | 1.8(•) | 38(•) | 0.2(•) |
| Diploma................. | 25,662 | 45.2 | 16,662 | 29.3 | 6,312 | 11.1 | 5,710 | 10.0 | 1,766 | 3.1 | 702(•) | 1.2(•) |
| Baccalaureate in nursing................ | 6,521 | 49.1 | 4,058 | 30.6 | 1,644 | 12.4 | 732 | 5.5 | 276(•) | 2.1(•) | 50(•) | 0.4(•) |
| Baccalaureate in related area, masters or doctorate.............. | 3,242 | 44.9 | 1,991 | 27.5 | 819(•) | 11.3(•) | 825(•) | 11.4(•) | 309(•) | 4.3(•) | 42(•) | 0.6(•) |
| Unknown................. | 299(•) | 55.3(•) | 201(•) | 37.2(•) | 32(•) | 5.9(•) | 0(•) | 0.0(•) | 0(•) | 0.0(•) | 9(•) | 1.6(•) |

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Table D-16. (Continued).

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | | | |
| Total.............. | 2,092 | 1.4 | 1,408 | 1.1 | 833 | 0.8 | 721 | 0.7 | 380 | 0.4 | 207 | 0.2 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years....... | 733 | 3.1 | 511 | 2.7 | 275 | 1.7 | 213 | 1.3 | 119 | 0.7 | 21 | 0.2 |
| 5-9 years............... | 598 | 3.1 | 489 | 2.8 | 380 | 2.5 | 208 | 1.4 | 97 | 0.7 | 13 | 0.1 |
| 10-19 years............. | 1,117 | 2.4 | 789 | 1.9 | 498 | 1.4 | 466 | 1.4 | 197 | 0.6 | 45 | 0.1 |
| 20-29 years............. | 1,146 | 3.2 | 674 | 2.7 | 380 | 1.6 | 383 | 1.6 | 137 | 0.6 | 90 | 0.4 |
| 30 or more years........ | 545 | 3.2 | 454 | 2.9 | 234 | 1.7 | 288 | 2.0 | 248 | 1.8 | 158 | 1.2 |
| Unknown................. | 142 | 12.2 | 123 | 11.6 | 62 | 6.9 | 19 | 2.2 | 0 | 0.0 | 85 | 8.9 |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree........ | 906 | 2.7 | 610 | 2.3 | 292 | 1.3 | 264 | 1.2 | 124 | 0.6 | 38 | 0.2 |
| Diploma................. | 1,415 | 1.7 | 1,096 | 1.5 | 621 | 1.0- | 590 | 1.0 | 300 | 0.5 | 198 | 0.3 |
| Baccalaureate in nursing................ | 778 | 3.7 | 493 | 3.2 | 355 | 2.5 | 164 | 1.2 | 155 | 1.2 | 39 | 0.3 |
| Baccalaureate in related area, masters or doctorate.............. | 474 | 4.8 | 339 | 4.2 | 275 | 3.5 | 302 | 3.8 | 108 | 1.5 | 31 | 0.4 |
| Unknown................. | 120 | 13.9 | 89 | 13.4 | 32 | 5.8 | 0 | 0.0 | 0 | 0.0 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-17. Frequency of nurse involvement with evaluating and modifying patient care plans by years of nursing experience and highest educational preparation.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total.............. | 36,987 | 37.1 | 29,116 | 29.2 | 14,189 | 14.2 | 13,206 | 13.2 | 5,138 | 5.2 | 1,072 | 1.1 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years....... | 5,891 | 36.7 | 5,065 | 31.6 | 2,792 | 17.4 | 1,531 | 9.5 | 623(•) | 3.9(•) | 141 | 0.9 |
| 5-9 years.............. | 5,298 | 37.7 | 4,226 | 30.1 | 2,389 | 17.0 | 1,592 | 11.3 | 489(•) | 3.5(•) | 58 | 0.4 |
| 10-19 years............. | 12,608 | 38.6 | 9,539 | 29.2 | 4,869 | 14.9 | 4,140 | 12.7 | 1,339 | 4.1 | 154 | 0.5 |
| 20-29 years............. | 8,856 | 39.0 | 5,941 | 26.2 | 2,995 | 13.2 | 3,369 | 14.8 | 1,361 | 6.0 | 182 | 0.8 |
| 30 or more years........ | 3,960 | 29.6 | 4,106 | 30.7 | 1,073 | 8.0 | 2,471 | 18.5 | 1,326 | 9.9 | 434 | 3.2 |
| Unknown................. | 374(•) | 42.2(•) | 238(•) | 26.9(•) | 71(•) | 8.0(•) | 101(•) | 11.4(•) | 0(•) | 0.0(•) | 102(•) | 11.5(•) |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree........ | 8,185 | 37.5 | 7,064 | 32.3 | 3,585 | 16.4 | 2,045 | 9.4 | 804(•) | 3.7(•) | 161(•) | 0.7(•) |
| Diploma.... ............ | 20,853 | 36.7 | 15,450 | 27.2 | 7,818 | 13.8 | 8,279 | 14.6 | 3,646 | 6.4 | 768(•) | 1.4(•) |
| Baccalaureate in nursing................ | 5,096 | 38.4 | 4,325 | 32.6 | 1,815 | 13.7 | 1,590 | 12.0 | 363(•) | 2.7(•) | 93(•) | 0.7(•) |
| Baccalaureate in related area, masters or doctorate.............. | 2,583 | 35.7 | 2,180 | 30.2 | 864(•) | 12.0(•) | 1,234 | 17.1 | 324(•) | 4.5(•) | 42(•) | 0.6(•) |
| Unknown................. | 271(•) | 50.0(•) | 97(•) | 18.0(•) | 107•) | 19.8(•) | 57(•) | 10.5(•) | 0(•) | 0.0(•) | 9(•) | 1.6(•) |

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Table D-17. (Continued).

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Standard errors | | | | | | | | | | | | |
| Total.............. | 1,698 | 1.2 | 1,340 | 1.1 | 1,074 | 0.9 | 919 | 0.8 | 644 | 0.8 | 234 | 0.2 |
| Years of nursing experience | | | | | | | | | | | | |
| Less than 5 years....... | 552 | 2.9 | 621 | 2.9 | 371 | 2.1 | 251 | 1.5 | 171 | 1.1 | 72 | 0.4 |
| 5-9 years............... | 520 | 2.8 | 482 | 2.7 | 409 | 2.6 | 278 | 1.9 | 175 | 1.2 | 47 | 0.3 |
| 10-19 years............. | 958 | 2.3 | 782 | 1.9 | 746 | 2.0 | 522 | 1.5 | 317 | 0.9 | 87 | 0.3 |
| 20-29 years............. | 1,078 | 3.3 | 601 | 2.3 | 405 | 1.7 | 489 | 1.9 | 302 | 1.3 | 82 | 0.4 |
| 30 or more years........ | 484 | 3.0 | 449 | 2.9 | 218 | 1.6 | 387 | 2.5 | 332 | 2.3 | 158 | 1.2 |
| Unknown................. | 132 | 11.9 | 127 | 11.8 | 42 | 4.8 | 53 | 5.9 | 0 | 0.0 | 94 | 9.7 |
| Highest educational preparation | | | | | | | | | | | | |
| Associate degree........ | 622 | 2.4 | 708 | 2.5 | 562 | 2.3 | 281 | 1.2 | 199 | 0.9 | 84 | 0.4 |
| Diploma................. | 1,267 | 1.7 | 948 | 1.4 | 787 | 1.2 | 760 | 1.2 | 582 | 1.0 | 211 | 0.4 |
| Baccalaureate in Nursing................ | 702 | 3.9 | 572 | 3.7 | 357 | 2.5 | 269 | 2.0 | 183 | 1.2 | 49 | 0.4 |
| Baccalaureate in related area, masters or doctorate | 400 | 4.7 | 417 | 4.7 | 268 | 3.5 | 360 | 4.4 | 109 | 1.5 | 31 | 0.4 |
| Unknown................. | 117 | 14.2 | 60 | 9.0 | 68 | 11.2 | 51 | 8.9 | 0 | 0.0 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table D-16. Frequency of nurse involvement with assigning and supervising nursing personnel by years of nursing experience and highest educational preparation.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total............. | 64,138 | 64.3 | 20,007 | 20.1 | 4,922 | 4.9 | 6,077 | 6.1 | 3,713 | 3.7 | 849 | 0.9 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years...... | 11,151 | 69.5 | 2,907 | 18.1 | 825(•) | 5.1(•) | 547(•) | 3.4(•) | 492(•) | 3.1(•) | 120(•) | 0.7(•) |
| 5-9 years.............. | 8,928 | 63.5 | 2,929 | 20.8 | 918 | 6.5 | 814(•) | 5.8(•) | 451(•) | 3.2(•) | 13(•) | 0.1(•) |
| 10-19 years............ | 21,174 | 64.9 | 6,763 | 20.7 | 1,442 | 4.4 | 2,119 | 6.5 | 1,089 | 3.3 | 63(•) | 0.2(•) |
| 20-29 years............ | 14,364 | 63.3 | 4,620 | 20.3 | 1,157 | 5.1 | 1,464 | 6.4 | 813(•) | 3.6(•) | 285(•) | 1.3(•) |
| 30 or more years....... | 8,036 | 60.1 | 2,545 | 19.0 | 580(•) | 4.3(•) | 1,076 | 8.0 | 868(•) | 6.5(•) | 268(•) | 2.0(•) |
| Unknown................ | 484(•) | 54.6(•) | 244(•) | 27.5(•) | 0(•) | 0.0(•) | 57(•) | 6.4(•) | 0(•) | 0.0(•) | 102(•) | 11.5(•) |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree........ | 15,460 | 70.5 | 3,804 | 17.4 | 854 | 3.9 | 1,204 | 5.5 | 404(•) | 1.8(•) | 117(•) | 0.5(•) |
| Diploma................. | 36,360 | 64.0 | 11,561 | 20.3 | 3,071 | 5.4 | 2,983 | 5.2 | 2,216 | 3.9 | 624(•) | 1.1(•) |
| Baccalaureate in nursing................ | 8,278 | 62.3 | 2,788 | 21.0 | 734(•) | 5.5(•) | 874(•) | 6.6(•) | 558(•) | 4.2(•) | 50(•) | 0.4(•) |
| Baccalaureate in related area, masters or doctorate.............. | 3,634 | 50.3 | 1,804 | 25.0 | 207(•) | 2.9(•) | 1,010(•) | 14.0(•) | 524(•) | 7.3(•) | 50(•) | 0.7(•) |
| Unknown................. | 406(•) | 75.1(•) | 51(•) | 9.4(•) | 57(•) | 10.5(•) | 7(•) | 1.2(•) | 12(•) | 2.3(•) | 9(•) | 1.6(•) |

(continued)

Table D-18. (Continued).

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | | | |
| Total | 2,340 | 1.3 | 1,234 | 1.1 | 538 | 0.5 | 613 | 0.8 | 519 | 0.5 | 207 | 0.2 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years | 846 | 2.7 | 377 | 2.2 | 215 | 1.3 | 162 | 1.0 | 165 | | | |
| 5-9 years | 667 | 3.1 | 434 | 2.6 | 224 | 1.5 | 252 | 1.7 | 185 | 1.3 | 13 | 0.1 |
| 10-19 years | 1,245 | 2.3 | 733 | 1.9 | 272 | 0.8 | 418 | 1.2 | 295 | 0.9 | 45 | 0.1 |
| 20-29 years | 1,262 | 3.0 | 540 | 2.2 | 262 | 1.1 | 425 | 1.8 | 197 | 0.9 | 114 | 0.5 |
| 30 or more years | 658 | 3.0 | 341 | 2.3 | 167 | 1.2 | 250 | 1.8 | 258 | 1.8 | 111 | 0.8 |
| Unknown | 143 | 12.4 | 127 | 11.7 | 0 | 0.0 | 38 | 4.3 | 0 | 0.0 | 94 | 9.7 |
| **Highest educational level** | | | | | | | | | | | | |
| Associate degree | 1,038 | 2.3 | 432 | 1.8 | 186 | 0.8 | 243 | 1.1 | 138 | 0.6 | 68 | 0.3 |
| Diploma | 1,679 | 1.7 | 906 | 1.3 | 449 | 0.8 | 460 | 0.8 | 428 | 0.7 | 182 | 0.3 |
| Baccalaureate in nursing | 800 | 3.8 | 506 | 3.3 | 222 | 1.6 | 264 | 1.9 | 200 | 1.5 | 39 | 0.3 |
| Baccalaureate in related area, masters or doctorate | 439 | 4.8 | 403 | 4.6 | 79 | 1.1 | 361 | 4.5 | 168 | 2.2 | 32 | 0.5 |
| Unknown | 136 | 11.5 | 51 | 6.7 | 57 | 9.8 | 7 | 1.3 | 12 | 2.3 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-19. Frequency of nurse involvement with planning and providing diversion program by years of nursing experience and highest educational preparation.

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| Activity | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total............... | 2,189 | 2.2 | 7,172 | 7.2 | 14,253 | 14.3 | 37,983 | 38.1 | 36,839 | 36.9 | 1,292 | 1.3 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years....... | 195(•) | 1.2(•) | 1,381 | 8.6 | 2,884 | 17.9 | 6,655 | 41.5 | 4,906 | 30.6 | 41(•) | 0.3(•) |
| 5-9 years............... | 312(•) | 2.2(•) | 958 | 6.8 | 2,110 | 15.0 | 6,000 | 42.7 | 4,592 | 32.7 | 83(•) | 0.6(•) |
| 10-19 years............. | 733(•) | 2.2(•) | 2,382 | 7.3 | 4,688 | 14.4 | 12,925 | 39.6 | 11,716 | 35.9 | 200(•) | 0.6(•) |
| 20-29 years............. | 606(•) | 2.7(•) | 1,415 | 6.2 | 3,262 | 14.4 | 7,840 | 34.5 | 9,271 | 40.8 | 310(•) | 1.4(•) |
| 30 or more years........ | 216(•) | 1.6(•) | 1,010 | 7.6 | 1,131 | 8.5 | 4,300 | 32.2 | 6,250 | 46.7 | 464(•) | 3.5(•) |
| Unknown................. | 127(•) | 14.3(•) | 28(•) | 3.2(•) | 198(•) | 22.3(•) | 243(•) | 27.4(•) | 104(•) | 11.7(•) | 187(•) | 21.1(•) |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree........ | 473(•) | 2.2(•) | 1,806 | 8.3 | 3,510 | 16.1 | 9,297 | 42.6 | 6,542 | 29.9 | 207(•) | 0.9(•) |
| Diploma................. | 1,219 | 2.1 | 3,472 | 6.1 | 7,180 | 12.6 | 21,267 | 37.4 | 22,721 | 40.0 | 956(•) | 1.7(•) |
| Baccalaureate in nursing................ | 351(•) | 2.6(•) | 1,493 | 11.2 | 2,293 | 17.3 | 3,958 | 29.8 | 5,108 | 38.5 | 78(•) | 0.6(•) |
| Baccalaureate in related area, masters or doctorate.............. | 127(•) | 1.8(•) | 389(•) | 5.4(•) | 1,119 | 15.5 | 3,196 | 44.2 | 2,356 | 32.6 | 42(•) | 0.6(•) |
| Unknown................. | 19(•) | 3.4(•) | 12(•) | 2.3(•) | 144(•) | 26.5(•) | 244(•) | 45.2(•) | 114(•) | 21.0(•) | 9(•) | 1.6(•) |

(continued)

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Table D-19. (Continued).

| | Frequency of involvement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Always | | Very often | | As often as not | | Seldom | | Never | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | | | |
| Total................ | 356 | 0.4 | 799 | 0.7 | 1,200 | 1.1 | 1,698 | 1.3 | 1,597 | 1.3 | 265 | 0.3 |
| **Years of nursing experience** | | | | | | | | | | | | |
| Less than 5 years......... | 76 | 0.5 | 290 | 1.7 | 406 | 2.2 | 590 | 2.6 | 584 | 2.7 | 31 | 0.2 |
| 5-9 years................. | 135 | 0.9 | 222 | 1.5 | 311 | 2.0 | 607 | 3.2 | 475 | 2.7 | 52 | 0.4 |
| 10-19 years............... | 223 | 0.7 | 575 | 1.7 | 669 | 1.9 | 962 | 2.2 | 850 | 2.2 | 86 | 0.3 |
| 20-29 years............... | 168 | 0.7 | 279 | 1.2 | 651 | 3.3 | 715 | 2.7 | 836 | 3.0 | 137 | 0.6 |
| 30 or more years.......... | 79 | 0.6 | 265 | 1.9 | 217 | 1.6 | 472 | 2.9 | 615 | 3.3 | 160 | 1.2 |
| Unknown................... | 109 | 11.0 | 20 | 2.4 | 89 | 9.2 | 86 | 9.4 | 54 | 6.1 | 127 | 12.0 |
| **Highest educational preparation** | | | | | | | | | | | | |
| Associate degree.......... | 168 | 0.8 | 461 | 2.0 | 442 | 1.8 | 719 | 2.4 | 556 | 2.2 | 88 | 0.4 |
| Diploma................... | 277 | 0.5 | 480 | 0.8 | 761 | 1.2 | 1,275 | 1.6 | 1,232 | 1.6 | 246 | 0.4 |
| Baccalaureate in nursing................. | 130 | 1.0 | 356 | 2.4 | 506 | 3.3 | 484 | 3.1 | 575 | 3.5 | 48 | 0.4 |
| Baccalaureate in related area, masters or doctorate | 70 | 1.0 | 151 | 2.0 | 255 | 3.2 | 498 | 4.9 | 421 | 4.8 | 31 | 0.4 |
| Unknown................... | 19 | 3.5 | 12 | 2.3 | 84 | 13.0 | 100 | 14.6 | 76 | 12.3 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table D-20. Number and percent of nursing homes by selected nursing home characteristics and intensity of RN utilization.

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 19,070 | 100.0 | 7,402(**) | 38.8 | 5,383 | 28.2 | 3,804 | 19.9 | 2,481 | 13.0 |
| **Ownership** | | | | | | | | | | |
| Proprietary... | 14,298 | 100.0 | 6,578 | 46.0 | 3,856 | 27.0 | 2,443 | 17.1 | 1,421 | 9.9 |
| Nonprofit..... | 3,758 | 100.0 | 638 | 17.0 | 1,234 | 32.8 | 979 | 26.0 | 907 | 24.1 |
| Government.... | 1,014 | 100.0 | 186(*) | 18.3(*) | 293(*) | 28.9(*) | 383 | 37.7 | 153 | 15.1 |
| **Affiliation** | | | | | | | | | | |
| Independent... | 10,038 | 100.0 | 4,872 | 48.5 | 2,103 | 21.0 | 1,721 | 17.1 | 1,343 | 13.4 |
| Chain-small... | 3,253 | 100.0 | 1,082 | 33.3 | 991 | 30.5 | 743 | 22.8 | 437 | 13.4 |
| Chain-medium.. | 2,218 | 100.0 | 723 | 32.6 | 867 | 39.1 | 415 | 18.7 | 214(*) | 9.6(*) |
| Chain-large... | 2,054 | 100.0 | 376 | 18.3 | 946 | 46.0 | 483 | 23.5 | 249(*) | 12.1(*) |
| Government.... | 1,014 | 100.0 | 186(*) | 18.3(*) | 293(*) | 28.9(*) | 383 | 37.7 | 153 | 15.1 |
| Unknown....... | 492 | 100.0 | 164(*) | 23.3(*) | 183(*) | 37.2(*) | 60(*) | 12.2(*) | 84(*) | 17.1(*) |
| **Available beds** | | | | | | | | | | |
| 50 or less..... | 6,983 | 100.0 | 4,628 | 66.3 | 1,020(*) | 14.6(*) | 880(*) | 12.6(*) | 455(*) | 6.5(*) |
| 51 to 99....... | 5,564 | 100.0 | 1,447 | 26.0 | 2,042 | 36.7 | 1,164 | 21.3 | 892 | 16.0 |
| 100 to 149..... | 3,900 | 100.0 | 944 | 24.2 | 1,387 | 35.6 | 964 | 24.7 | 605 | 15.5 |
| 150 to 199..... | 1,435 | 100.0 | 198(*) | 13.8(*) | 555 | 38.7 | 432 | 30.1 | 249 | 17.3 |
| 200 and over.. | 1,187 | 100.0 | 185 | 15.6 | 379 | 31.9 | 343 | 28.9 | 280 | 23.6 |
| **Number of services** | | | | | | | | | | |
| Less than 11.. | 4,978 | 100.0 | 3,132 | 62.9 | 1,227 | 24.6 | 419(*) | 8.4(*) | 200(*) | 4.0(*) |
| 11 to 12...... | 4,256 | 100.0 | 1,592 | 37.4 | 1,172 | 27.5 | 964 | 22.7 | 528 | 12.4 |
| 13 to 14...... | 7,039 | 100.0 | 1,858 | 26.4 | 2,125 | 30.2 | 1,890 | 26.9 | 1,166 | 16.6 |
| 15 or more ... | 2,797 | 100.0 | 820 | 29.3 | 859 | 30.7 | 531 | 19.0 | 586 | 21.0 |

(continued)

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Table D-20. (continued).

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Certification | | | | | | | | | | |
| Skilled nursing only.... | 2,530 | 100.0 | 217(•) | 8.6(•) | 864 | 34.2 | 743 | 29.4 | 706 | 27.9 |
| Skilled and intermediate....... | 5,721 | 100.0 | 339 | 5.9 | 2,147 | 37.5 | 2,053 | 35.9 | 1,182 | 20.7 |
| Intermediate care only... | 5,206 | 100.0 | 2,373 | 45.6 | 1,645 | 31.6 | 887 | 17.0 | 300(•) | 5.8(•) |
| Neither....... | 4,652 | 100.0 | 3,654 | 78.5 | 631(•) | 13.6(•) | 111(•) | 2.4(•) | 256(•) | 5.5(•) |
| Unknown....... | 961(•) | 100.0(•) | 820(•) | 85.3(•) | 95(•) | 9.9(•) | 10(•) | 1.1(•) | 36(•) | 3.7(•) |
| MD availability | | | | | | | | | | |
| MD on premises at all times | 281 | 100.0 | 0(•) | 0.0(•) | 67(•) | 23.9(•) | 8(•) | 2.7(•) | 206(•) | 73.4(•) |
| MD on premises weekdays.... | 1,210 | 100.0 | 251(•) | 20.7(•) | 403(•) | 33.0(•) | 313 | 25.9 | 247 | 20.4 |
| MD on premises at scheduled times | 9,204 | 100.0 | 2,303 | 25.0 | 3,150 | 34.2 | 2,546 | 27.7 | 1,206 | 13.1 |
| MD on call only | 5,735 | 100.0 | 3,075 | 53.6 | 1,428 | 24.9 | 683 | 11.9 | 549 | 9.6 |
| Other......... | 1,906 | 100.0 | 1,579(•) | 82.8(•) | 152(•) | 8.0(•) | 71(•) | 3.7(•) | 106(•) | 5.6(•) |
| Unknown....... | 733 | 100.0 | 195 | 26.6 | 187 | 25.5 | 184 | 25.1 | 167 | 22.8 |
| Standard errors | | | | | | | | | | |
| Total.... | 587 | 0.0 | 688 | 2.7 | 361 | 2.0 | 282 | 1.5 | 231 | 1.3 |
| Ownership | | | | | | | | | | |
| Proprietory... | 668 | 0.0 | 701 | 3.1 | 271 | 2.2 | 221 | 1.7 | 167 | 1.2 |
| Nonprofit..... | 344 | 0.0 | 159 | 4.0 | 251 | 5.2 | 155 | 3.9 | 167 | 4.1 |
| Government.... | 149 | 0.0 | 73 | 6.4 | 87 | 7.3 | 96 | 7.6 | 38 | 3.9 |

(continued)

Table D-20. (continued).

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Affiliation** | | | | | | | | | | |
| Independent... | 680 | 0.0 | 674 | 4.3 | 289 | 2.9 | 217 | 2.3 | 193 | 2.0 |
| Chain-small... | 242 | 0.0 | 166 | 4.1 | 141 | 3.8 | 106 | 3.1 | 99 | 2.9 |
| Chain-medium.. | 224 | 0.0 | 148 | 5.3 | 148 | 5.3 | 86 | 3.7 | 61 | 2.7 |
| Chain-large... | 175 | 0.0 | 72 | 3.3 | 131 | 4.6 | 88 | 3.8 | 59 | 2.8 |
| Government.... | 149 | 0.0 | 73 | 8.4 | 87 | 7.3 | 96 | 7.6 | 38 | 3.9 |
| Unknown....... | 101 | 0.0 | 54 | 9.5 | 70 | 10.5 | 31 | 6.1 | 40 | 7.5 |
| **Available beds** | | | | | | | | | | |
| 50 or less.... | 841 | 0.0 | 671 | 5.0 | 277 | 4.0 | 197 | 3.0 | 128 | 1.9 |
| 51 to 99...... | 196 | 0.0 | 163 | 2.9 | 190 | 3.2 | 145 | 2.6 | 163 | 2.7 |
| 100 to 149.... | 165 | 0.0 | 102 | 2.5 | 136 | 3.0 | 105 | 2.6 | 96 | 2.3 |
| 150 to 199.... | 99 | 0.0 | 42 | 2.8 | 74 | 4.0 | 55 | 3.5 | 47 | 3.1 |
| 200 and over.. | 45 | 0.0 | 35 | 2.8 | 40 | 3.2 | 39 | 3.2 | 37 | 3.0 |
| **Number of services** | | | | | | | | | | |
| Less than 11.. | 729 | 0.0 | 718 | 7.2 | 274 | 5.9 | 122 | 2.6 | 112 | 2.3 |
| 11 to 12...... | 349 | 0.0 | 292 | 4.8 | 137 | 3.3 | 140 | 3.2 | 109 | 2.5 |
| 13 to 14...... | 421 | 0.0 | 337 | 3.8 | 196 | 2.8 | 209 | 2.8 | 148 | 2.1 |
| 15 or more.... | 277 | 0.0 | 206 | 5.7 | 143 | 4.6 | 86 | 3.1 | 109 | 3.7 |
| **Certification** | | | | | | | | | | |
| Skilled nursing only... | 221 | 00 | 90 | 3.3 | 125 | 4.3 | 125 | 4.3 | 123 | 4.2 |
| Skilled and intermediate....... | 244 | 0.0 | 63 | 1.1 | 172 | 2.6 | 176 | 2.8 | 138 | 2.2 |
| Intermediate care only... | 279 | 0.0 | 206 | 3.6 | 188 | 3.2 | 181 | 3.2 | 100 | 1.9 |
| Neither....... | 702 | 0.0 | 707 | 6.2 | 248 | 5.4 | 53 | 1.2 | 118 | 2.6 |
| Unknown....... | 291 | 0.0 | 277 | 9.1 | 83 | 8.3 | 10 | 1.1 | 32 | 3.4 |

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Table D-20. (continued).

|  | Total |  | RN hours per inpatient day |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Less than .100 |  | .100 to .299 |  | .300 to .499 |  | .500 or more |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **MD availability** |  |  |  |  |  |  |  |  |  |  |
| MD on premises at all times | 86 | 0.0 | 0 | 0.0 | 29 | 10.5 | 5 | 2.0 | 81 | 10.9 |
| MD on premises weekdays.... | 210 | 0.0 | 156 | 10.5 | 96 | 7.5 | 89 | 6.9 | 58 | 5.2 |
| MD on premises at scheduled times | 365 | 0.0 | 255 | 2.4 | 230 | 2.4 | 232 | 2.3 | 176 | 1.8 |
| MD on call only | 505 | 0.0 | 460 | 5.2 | 282 | 4.6 | 128 | 2.3 | 110 | 2.0 |
| Other.......... | 696 | 0.0 | 651 | 7.3 | 60 | 4.1 | 32 | 2.1 | 58 | 3.5 |
| Unknown....... | 138 | 0.0 | 102 | 10.8 | 56 | 7.2 | 54 | 7.1 | 53 | 6.9 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: All nursing homes included in the National Nursing Home Survey.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes 4,304 facilities that reported no registered nurse hours worked during the previous week.

Table D-21. Number and percent of nursing homes by selected nursing home staffing characteristics and intensity of RN utilization.

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 19,070 | 100.0 | 7,402(**) | 38.8 | 5,383 | 28.2 | 3,804 | 19.9 | 2,481 | 13.0 |
| **Full-time equivalent RNs** | | | | | | | | | | |
| <1............ | 5,681 | 100.0 | 5,277 | 92.9 | 312(*) | 5.5(*) | 60(*) | 1.1(*) | 33(*) | 0.6(*) |
| 1 to <2....... | 2,533 | 100.0 | 1,385 | 54.7 | 898 | 35.5 | 214 | 8.5(*) | 35(*) | 1.4(*) |
| 2 to <5....... | 4,509 | 100.0 | 551 | 12.2 | 2,686 | 59.6 | 967 | 21.5 | 304(*) | 6.7(*) |
| 5 to <10...... | 3,988 | 100.0 | 116(*) | 2.9(*) | 1,203 | 30.2 | 1,645 | 41.2 | 1,024 | 25.7 |
| ≥10........... | 2,359 | 100.0 | 74(*) | 3.1(*) | 283 | 12.0 | 918 | 38.9 | 1,084 | 46.0 |
| **LPN hours per inpatient day** | | | | | | | | | | |
| Less than .300.......... | 7,842 | 100.0 | 4,891 | 62.4 | 1,084 | 13.8 | 1,080 | 13.8 | 788 | 10.0 |
| .300 to .499.. | 5,455 | 100.0 | 1,250 | 22.9 | 2,165 | 39.7 | 1,397 | 25.6 | 643 | 11.8 |
| .500 to .699.. | 3,566 | 100.0 | 1,018 | 28.5 | 1,393 | 39.1 | 911 | 25.5 | 244 | 6.8 |
| .700 or more.. | 2,208 | 100.0 | 243 | 11.0 | 741 | 33.6 | 417 | 18.9 | 806 | 36.5 |
| **Aide hours per inpatient day** | | | | | | | | | | |
| Less than 1.4. | 6,630 | 100.0 | 4,797 | 72.4 | 1,009 | 15.2 | 533 | 8.0 | 291(*) | 4.4(*) |
| 1.4 to 1.7.... | 4,105 | 100.0 | 1,108 | 27.0 | 1,970 | 48.0 | 804 | 19.6 | 222(*) | 5.4(*) |
| 1.8 to 2.1.... | 4,581 | 100.0 | 854 | 18.6 | 1,562 | 34.1 | 1,443 | 31.5 | 722 | 15.8 |
| 2.2 or more... | 3,754 | 100.0 | 642 | 17.1 | 841 | 22.4 | 1,025 | 27.3 | 1,246 | 33.2 |

(continued)

Table D-21. (continued).

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | |
| Total.... | 587 | 0.0 | 688 | 2.7 | 361 | 2.0 | 269 | 1.5 | 231 | 1.3 |
| **Full-time equivalent RNs** | | | | | | | | | | |
| <1............ | 682 | 0.0 | 687 | 4.1 | 229 | 4.0 | 45 | 0.8 | 32 | 0.6 |
| 1 to <2....... | 278 | 0.0 | 195 | 5.7 | 181 | 5.7 | 107 | 4.0 | 29 | 1.1 |
| 2 to <5....... | 287 | 0.0 | 79 | 1.8 | 217 | 3.8 | 194 | 3.7 | 104 | 2.2 |
| 5 to <10...... | 241 | 0.0 | 43 | 1.1 | 110 | 2.7 | 156 | 3.3 | 177 | 3.6 |
| ≥10........... | 142 | 0.0 | 27 | 1.1 | 43 | 1.8 | 82 | 3.2 | 122 | 3.5 |
| **LPN hours per inpatient day** | | | | | | | | | | |
| Less than .300 | 703 | 0.0 | 684 | 4.0 | 158 | 2.3 | 140 | 2.0 | 140 | 1.9 |
| .300 to .499.. | 348 | 0.0 | 152 | 2.7 | 208 | 3.8 | 164 | 2.9 | 107 | 1.9 |
| .500 to .699.. | 287 | 0.0 | 206 | 4.6 | 103 | 4.1 | 149 | 3.8 | 57 | 1.6 |
| .700 or more.. | 244 | 0.0 | 75 | 3.3 | 143 | 5.5 | 127 | 5.2 | 159 | 5.8 |
| **Aide hours per inpatient day** | | | | | | | | | | |
| Less than 1.4. | 728 | 0.0 | 709 | 3.7 | 139 | 2.5 | 105 | 1.7 | 92 | 1.4 |
| 1.4 to 1.7.... | 371 | 0.0 | 213 | 4.4 | 289 | 4.8 | 127 | 3.1 | 61 | 1.5 |
| 1.8 to 2.1.... | 313 | 0.0 | 184 | 3.5 | 188 | 3.6 | 176 | 3.5 | 131 | 2.7 |
| 2.2 or more... | 298 | 0.0 | 153 | 3.7 | 126 | 3.2 | 168 | 3.9 | 172 | 3.9 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: All nursing homes included in the National Nursing Home Survey.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes 4,304 facilities that reported no registered nurse hours worked during the previous week.

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Table D-22. Number and percent of nursing homes by state RN requirement for highest level of care offered and intensity of RN utilization in nursing home of residence.

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total...... | 19,070 | 100.0 | 7,402(**) | 38.8 | 5,383 | 28.2 | 3,804 | 19.9 | 2,481 | 13.0 |
| **State RN requirement** | | | | | | | | | | |
| RN on all shifts | 1,062 | 100.0 | 13(*) | 1.2(*) | 221(*) | 20.8(*) | 489 | 46.0 | 339 | 31.9 |
| One full-time RN and director of nursing....... | 2,217 | 100.0 | 88(*) | 4.0(*) | 700 | 31.6 | 937 | 42.3 | 492 | 22.2 |
| Full-time RN | 2,607 | 100.0 | 756 | 29.0 | 1,140 | 43.7 | 597 | 22.9 | 114(*) | 4.4(*) |
| Director of nursing is RN. | 3,314 | 106.0 | 780 | 23.5 | 1,446 | 43.6 | 760 | 22.9 | 328(*) | 9.9(*) |
| No full-time RN requirement... | 9,869 | 100.0 | 6,267 | 63.5 | 2,034 | 20.6 | 925 | 9.4 | 643 | 6.5 |
| **Standard Errors** | | | | | | | | | | |
| Total...... | 587 | 0.0 | 600 | 2.7 | 361 | 2.0 | 209 | 1.5 | 231 | 1.3 |
| **State RN requirement** | | | | | | | | | | |
| RN on all shifts. | 112 | 0.0 | 10 | 0.9 | 52 | 4.4 | 80 | 5.0 | 60 | 5.2 |
| One full-time RN and director of nursing....... | 109 | 0.0 | 20 | 1.3 | 101 | 3.9 | 115 | 4.1 | 80 | 3.5 |
| Full-time RN.... | 224 | 0.0 | 107 | 3.0 | 132 | 4.3 | 101 | 3.6 | 120 | 4.2 |
| Director of nursing is RN. | 207 | 0.0 | 150 | 4.1 | 164 | 4.4 | 151 | 4.0 | 90 | 2.0 |
| No full-time RN requirement... | 670 | 0.0 | 704 | 4.1 | 310 | 3.2 | 177 | 1.9 | 151 | 1.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: All nursing homes included in the National Nursing Home Survey.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes 4,304 facilities that reported no registered nurse hours worked during the previous week.

Table D-23. Number and percent of current nursing home residents by selected characteristics and intensity of RN utilization in the nursing home of residence.

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.. | 1,491,446 | 100.0 | 351,803(**) | 23.6 | 506,703 | 34.0 | 376,825 | 25.3 | 256,115 | 17.2 |
| **Age** | | | | | | | | | | |
| Under 65.... | 163,266 | 100.0 | 63,112 | 38.7 | 43,578 | 26.7 | 26,578 | 16.3 | 29,998 | 18.4 |
| 65 to 74.... | 205,583 | 100.0 | 53,207 | 25.9 | 74,548 | 36.3 | 49,409 | 24.0 | 28,419 | 13.8 |
| 75 to 84.... | 484,701 | 100.0 | 113,222 | 23.4 | 165,287 | 34.1 | 122,602 | 25.3 | 83,590 | 17.2 |
| 85 and older | 635,551 | 100.0 | 121,214 | 19.1 | 221,992 | 34.9 | 178,236 | 28.0 | 114,108 | 18.0 |
| Unknown..... | 2,346(*) | 100.0(*) | 1,048(*) | 44.7(*) | 1,298(*) | 55.3(*) | 0(*) | 0.0(*) | 0(*) | 0.0(*) |
| **Race** | | | | | | | | | | |
| White... ... | 1,374,620 | 100.0 | 315,092 | 22.9 | 462,831 | 33.7 | 357,590 | 26.0 | 239,106 | 17.5 |
| Nonwhite.... | 109,637 | 100.0 | 34,657 | 31.6 | 42,107 | 38.4 | 18,436 | 16.8 | 14,436 | 13.2 |
| Unknown..... | 7,190(*) | 100.0(*) | 2,054(*) | 28.6(*) | 1,765(*) | 24.5(*) | 798(*) | 11.1(*) | 2,572(*) | 35.8(*) |
| **Marital status** | | | | | | | | | | |
| Married..... | 188,221 | 100.0 | 36,748 | 19.5 | 67,626 | 35.9 | 48,591 | 25.8 | 35,256 | 18.7 |
| Previously married... | 1,000,592 | 100.0 | 229,417 | 22.9 | 339,934 | 34.0 | 256,139 | 25.6 | 175,101 | 17.5 |
| Never married | 271,416 | 100.0 | 76,739 | 28.3 | 88,153 | 32.5 | 64,927 | 23.9 | 41,598 | 15.3 |
| Unknown..... | 31,217 | 100.0 | 8,900 | 28.5 | 10,990 | 35.2 | 7,168 | 23.0 | 4,159(*) | 13.3(*) |
| **Living children** | | | | | | | | | | |
| Yes......... | 886,218 | 100.0 | 189,133 | 21.3 | 295,728 | 33.4 | 235,617 | 26.6 | 165,741 | 18.7 |
| No.......... | 526,561 | 100.0 | 144,296 | 27.4 | 180,353 | 34.3 | 123,497 | 23.5 | 78,414 | 14.9 |
| Unknown..... | 78,667 | 100.0 | 18,375 | 23.4 | 30,622 | 38.9 | 17,710 | 22.5 | 11,961 | 15.2 |

(continued)

Table D-23. (continued).

| | Total | | RN hours per inpatient day: Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard Errors** | | | | | | | | | | |
| Total.. | 10,891 | 0.0 | 19,917 | 1.3 | 23,956 | 1.6 | 20,742 | 1.4 | 20,213 | 1.3 |
| **Age** | | | | | | | | | | |
| Under 65.... | 9,530 | 0.0 | 7,246 | 3.4 | 4,811 | 2.7 | 3,584 | 2.1 | 5,107 | 2.8 |
| 65 to 74.... | 8,103 | 0.0 | 4,948 | 2.2 | 6,016 | 2.5 | 4,677 | 2.1 | 3,420 | 1.6 |
| 75 to 84.... | 12,319 | 0.0 | 8,677 | 1.7 | 9,799 | 1.9 | 8,479 | 1.7 | 8,123 | 1.6 |
| 85 and over. | 13,889 | 0.0 | 8,882 | 1.4 | 12,880 | 1.8 | 11,214 | 1.7 | 9.917 | 1.5 |
| Unknown..... | 1,623 | 0.0 | 553 | 21.7 | 883 | 21.7 | 0 | 0.0 | 0 | 0.0 |
| **Race** | | | | | | | | | | |
| White....... | 17,480 | 0.0 | 18,839 | 1.3 | 22,217 | 1.6 | 20,014 | 1.4 | 19,240 | 1.3 |
| Nonwhite.... | 10,011 | 0.0 | 6,292 | 4.2 | 7,531 | 5.0 | 3,283 | 3.0 | 3,553 | 3.1 |
| Unknown..... | 1,826 | 0.0 | 814 | 10.4 | 741 | 9.7 | 487 | 6.4 | 1,392 | 13.8 |
| **Marital status** | | | | | | | | | | |
| Married..... | 7,720 | 0.0 | 4,134 | 2.0 | 5,639 | 2.5 | 4,470 | 2.2 | 4,006 | 2.0 |
| Previously married... | 17,237 | 0.0 | 14,777 | 1.4 | 17,501 | 1.7 | 14,961 | 1.5 | 15,648 | 1.5 |
| Never married | 10,887 | 0.0 | 7,903 | 2.4 | 6,516 | 2.2 | 3,078 | 2.1 | 5,034 | 1.8 |
| Unknown..... | 3,882 | 0.0 | 1,933 | 5.5 | 2,570 | 6.4 | 1,827 | 5.2 | 1,400 | 4.2 |
| **Living children** | | | | | | | | | | |
| Yes......... | 15,997 | 0.0 | 12,281 | 1.4 | 15,667 | 1.7 | 14,229 | 1.6 | 14,307 | 1.5 |
| No.......... | 12,893 | 0.0 | 10,396 | 1.8 | 10,452 | 1.8 | 8,727 | 1.6 | 7,566 | 1.4 |
| Unknown..... | 6,058 | 0.0 | 3,864 | 3.5 | 4,255 | 4.2 | 2,781 | 3.3 | 2,418 | 2.9 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: Current residents in nursing homes.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes residents in facilities that reported no registered nurse hours worked during the previous week.

Table D-24. Number and percent of current nursing home residents by patient stay characteristics and intensity of RN utilization in nursing home of residence.

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.......... | 1,491,446 | 100.0 | 351,803(**) | 23.6 | 506,703 | 34.0 | 378,825 | 25.3 | 256,116 | 17.2 |
| **Length of current stay** | | | | | | | | | | |
| Less than 1 year.... | 543,593 | 100.0 | 116,169 | 21.4 | 183,185 | 33.7 | 148,328 | 27.3 | 95,917 | 17.7 |
| 1 year but less than 2............. | 284,646 | 100.0 | 56,500 | 19.8 | 105,656 | 37.1 | 72,143 | 25.3 | 50,347 | 17.7 |
| 2 years but less than 3............. | 185,044 | 100.0 | 43,323 | 23.4 | 59,611 | 32.2 | 46,737 | 25.3 | 35,373 | 19.1 |
| 3 years but less than 4............. | 118,002 | 100.0 | 32,939 | 27.9 | 36,154 | 30.6 | 28,492 | 24.1 | 20,417 | 17.2 |
| 4 years or more..... | 360,154 | 100.0 | 102,873 | 28.6 | 122,096 | 33.9 | 81,125 | 22.5 | 54,060 | 15.0 |
| **Source of payment for first month** | | | | | | | | | | |
| Own income.......... | 659,186 | 100.0 | 156,235 | 23.7 | 217,924 | 33.1 | 161,242 | 24.5 | 184,291 | 18.8 |
| Medicare............ | 60,506 | 100.0 | 3,477(*) | 5.7(*) | 19,273 | 31.9 | 19,929 | 32.9 | 17,828 | 29.5 |
| Medicaid............ | 572,709 | 100.0 | 125,902 | 22.0 | 206,542 | 36.1 | 152,899 | 26.7 | 87,365 | 15.3 |
| Other government.... | 69,184 | 100.0 | 35,603 | 51.5 | 15,873 | 22.9 | 10,354 | 15.0 | 7,355 | 10.6 |
| Other source-....... | 22,673 | 100.0 | 5,896(*) | 26.0(*) | 8,972 | 39.6 | 4,623(*) | 20.4(*) | 3,182 | 14.1 |
| Unknown............. | 107,187 | 100.0 | 24,691 | 23.0 | 38,118 | 35.6 | 27,778 | 25.9 | 16,599 | 15.4 |

(continued)

Table D-24. (continued).

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | |
| Total.......... | 16,691 | 0.0 | 19,917 | 1.3 | 23,956 | 1.6 | 20,742 | 1.4 | 20,213 | 1.3 |
| **Length of current stay** | | | | | | | | | | |
| Less than 1 year.... | 13,438 | 0.0 | 8,989 | 1.6 | 10,724 | 1.8 | 10,116 | 1.7 | 9,610 | 1.6 |
| 1 year but less than 2............. | 9,742 | 0.0 | 5,419 | 1.8 | 7,807 | 2.3 | 5,632 | 1.9 | 5,276 | 1.8 |
| 2 years but less than 3............. | 7,456 | 0.0 | 4,408 | 2.1 | 4,756 | 2.3 | 4,363 | 2.2 | 4,088 | 2.0 |
| 3 years but less than 4............. | 6,448 | 0.0 | 4,130 | 3.0 | 3,757 | 2.8 | 3,246 | 2.5 | 3,079 | 2.4 |
| 4 years or more..... | 12,454 | 0.0 | 8,476 | 2.1 | 8,841 | 2.2 | 6,908 | 1.8 | 6,507 | 1.7 |
| **Source of payment for first month** | | | | | | | | | | |
| Own income.......... | 18,564 | 0.0 | 11,508 | 1.7 | 13,714 | 1.9 | 11,570 | 1.7 | 13,837 | 1.9 |
| Medicare............ | 5,712 | 0.0 | 1,454 | 2.3 | 3,050 | 4.5 | 3,053 | 4.5 | 3,865 | 5.1 |
| Medicaid............ | 16,397 | 0.0 | 10,471 | 1.7 | 13,491 | 2.6 | 11,037 | 1.8 | 9,108 | 1.5 |
| Other government.... | 7,738 | 0.0 | 6,504 | 5.6 | 2,855 | 4.1 | 2,859 | 3.9 | 1,836 | 2.7 |
| Other sources....... | 4,936 | 0.0 | 1,548 | 7.5 | 4,228 | 12.2 | 1,600 | 7.2 | 1,324 | 5.8 |
| Unknown............. | 6,198 | 0.0 | 3,465 | 2.9 | 4,332 | 3.3 | 3,148 | 2.7 | 2,448 | 2.2 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: Current residents in nursing homes.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes residents in facilities that reported no registered nurse hours during the previous week.

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Table D-25. Number and percent of current nursing home residents by selected health status measures and intensity of RN utilization in nursing home of residence.

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total......... | 1,491,448 | 100.0 | 351,803(**) | 23.6 | 506,703 | 34.0 | 376,826 | 25.3 | 256,116 | 17.2 |
| **Physical health** | | | | | | | | | | |
| Excellent.......... | 40,727 | 100.0 | 16,868 | 41.4 | 12,238 | 30.0 | 7,295 | 17.9 | 4,332(*) | 10.7(*) |
| Good................ | 531,098 | 100.0 | 131,401 | 24.7 | 170,587 | 32.1 | 133,976 | 25.2 | 95,136 | 17.8 |
| Fair................ | 643,513 | 100.0 | 142,460 | 22.1 | 230,181 | 35.8 | 168,776 | 26.2 | 102,098 | 16.0 |
| Poor................ | 238,938 | 100.0 | 58,293 | 24.4 | 80,683 | 33.8 | 54,310 | 22.7 | 45,651 | 19.1 |
| Unknown............. | 37,170 | 100.0 | 2,782(*) | 7.5(*) | 13,02C | 35.0 | 12,469 | 33.5 | 8,899 | 23.9 |
| **Mental health** | | | | | | | | | | |
| Excellent.......... | 53,464 | 100.0 | 17,479 | 32.7 | 20,113 | 37.6 | 8,297 | 15.5 | 7,574 | 14.2 |
| Good................ | 404,096 | 100.0 | 102,574 | 25.4 | 132,316 | 32.7 | 108,085 | 26.7 | 62,121 | 15.1 |
| Fair................ | 554,403 | 100.0 | 130,519 | 23.5 | 185,259 | 33.4 | 149,321 | 26.9 | 89,304 | 16.1 |
| Poor................ | 428,972 | 100.0 | 98,160 | 22.9 | 152,250 | 35.5 | 95,131 | 22.2 | 83,431 | 19.5 |
| Unknown............. | 50,511 | 100.0 | 3,070(*) | 6.1(*) | 16,765 | 33.2 | 15,992 | 31.7 | 14,684 | 29.1 |
| **Number of behavioral problems** | | | | | | | | | | |
| None................ | 906,181 | 100.0 | 223,740 | 24.7 | 308,064 | 34.0 | 229,443 | 25.3 | 144,935 | 16.0 |
| Few................. | 459,587 | 100.0 | 100,628 | 21.9 | 155,089 | 33.7 | 115,504 | 25.1 | 88,367 | 19.3 |
| Some/many.......... | 113,019 | 100.0 | 25,844 | 22.9 | 39,388 | 34.9 | 28,916 | 25.6 | 18,870 | 16.7 |
| Unknown............. | 12,658 | 100.0 | 1,591(*) | 12.6(*) | 4,162(*) | 32.9(*) | 2,963(*) | 23.4(*) | 3,942(*) | 31.1(*) |
| **Memory difficulties** | | | | | | | | | | |
| None................ | 550,849 | 100.0 | 132,667 | 24.1 | 187,505 | 34.0 | 143,853 | 26.1 | 86,824 | 15.8 |
| Some................ | 285,277 | 100.0 | 81,421 | 28.5 | 96,667 | 33.9 | 65,490 | 23.0 | 41,699 | 14.6 |
| Much................ | 637,267 | 100.0 | 136,595 | 21.4 | 216,689 | 34.0 | 162,886 | 25.6 | 121,097 | 19.0 |
| Unknown............. | 18,054 | 100.0 | 1,120(*) | 6.2(*) | 5,842(*) | 32.4(*) | 4,596(*) | 25.5(*) | 6,496 | 36.0 |

(continued)

Table D-25. (continued).

| | RN hours per inpatient day | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | |
| Total.......... | 16,091 | 0.0 | 19,917 | 1.3 | 23,956 | 1.6 | 20,742 | 1.4 | 20,213 | 1.3 |
| **Physical health** | | | | | | | | | | |
| Excellent........... | 4,931 | 0.0 | 3,655 | 8.4 | 2,017 | 5.6 | 1,653 | 4.0 | 1,602 | 3.9 |
| Good................ | 15,245 | 0.0 | 10,002 | 1.9 | 10,702 | 1.9 | 10,124 | 1.8 | 10,272 | 1.8 |
| Fair................ | 14,336 | 0.0 | 10,197 | 1.5 | 13,110 | 1.8 | 11,000 | 1.6 | 9,206 | 1.4 |
| Poor................ | 9,807 | 0.0 | 5,704 | 2.2 | 6,452 | 2.4 | 5,516 | 2.1 | 5,009 | 2.1 |
| Unknown............. | 6,477 | 0.0 | 1,033 | 4.3 | 3,930 | 8.5 | 3,897 | 8.5 | 3,884 | 7.4 |
| **Mental health** | | | | | | | | | | |
| Excellent........... | 6,140 | 0.0 | 4,051 | 6.0 | 3,902 | 5.9 | 1,741 | 3.3 | 2,109 | 3.9 |
| Good................ | 12,362 | 0.0 | 8,083 | 1.9 | 9,054 | 2.0 | 8,355 | 1.9 | 6,077 | 1.5 |
| Fair................ | 13,740 | 0.0 | 9,742 | 1.7 | 11,305 | 1.9 | 10,211 | 1.7 | 8,402 | 1.5 |
| Poor................ | 12,206 | 0.0 | 7,848 | 1.7 | 9,251 | 2.0 | 7,599 | 1.7 | 9,347 | 1.8 |
| Unknown............. | 6,928 | 0.0 | 1,764 | 3.3 | 4,092 | 6.6 | 4,043 | 6.8 | 3,713 | 6.3 |
| **Number of behavioral problems** | | | | | | | | | | |
| None................ | 17,457 | 0.0 | 14,070 | 1.5 | 17,724 | 1.8 | 14,121 | 1.5 | 11,943 | 1.3 |
| Few................. | 14,155 | 0.0 | 8,247 | 1.7 | 9,559 | 2.0 | 8,722 | 1.8 | 10,007 | 2.1 |
| Some/many........... | 8,332 | 0.0 | 3,396 | 2.7 | 4,112 | 3.1 | 3,390 | 2.7 | 3,059 | 2.5 |
| Unknown............. | 3,505 | 0.0 | 1,142 | 8.6 | 1,924 | 12.9 | 1,794 | 12.2 | 2,052 | 13.3 |
| **Memory difficulties** | | | | | | | | | | |
| None................ | 15,515 | 0.0 | 11,214 | 1.8 | 12,524 | 2.0 | 10,078 | 1.8 | 8,470 | 1.5 |
| Some................ | 9,959 | 0.0 | 6,978 | 2.2 | 7,149 | 2.2 | 5,530 | 1.8 | 4,841 | 1.6 |
| Much................ | 15,179 | 0.0 | 10,208 | 1.5 | 12,242 | 1.8 | 10,973 | 1.7 | 11,723 | 1.7 |
| Unknown............. | 4,088 | 0.0 | 799 | 4.4 | 2,287 | 10.5 | 2,143 | 10.2 | 2,541 | 11.1 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: Current residents in nursing homes.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes residents in facilities that reported no registered nurse hours during the previous week.

Table D-26. Number and percent of RNs by selected nurse characteristics and intensity of RN utilization in the place of employment.

| | Total | | RN hours per inpatient day | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total | 99,707 | 100.0 | 4,926 | 4.9 | 24,455 | 24.5 | 34,426 | 34.5 | 35,900 | 36.0 |
| **Age** | | | | | | | | | | |
| Under 35 years | 21,769 | 100.0 | 1,470 | 6.8 | 5,486 | 25.2 | 8,027 | 36.9 | 6,786 | 31.2 |
| 35 to 44 | 25,253 | 100.0 | 1,392 | 5.5 | 6,353 | 25.2 | 8,913 | 35.3 | 8,595 | 34.0 |
| 45 to 54 | 27,116 | 100.0 | 1,176 | 4.3 | 6,420 | 23.7 | 9,318 | 34.4 | 10,203 | 37.6 |
| 55 to 64 | 31,193 | 100.0 | 690 | 3.3 | 4,911 | 23.2 | 6,963 | 32.9 | 8,629 | 40.7 |
| 65 and over | 3,536 | 100.0 | 185(•) | 5.2(•) | 799 | 22.6 | 933 | 26.4 | 1,618(•) | 45.8(•) |
| Unknown | 841 | 100.0 | 14(•) | 1.6(•) | 486(•) | 57.8(•) | 273(•) | 32.4(•) | 68(•) | 8.1(•) |
| **Highest educational preparation** | | | | | | | | | | |
| Associate | 21,843 | 100.0 | 1,346 | 6.2 | 6,446 | 29.5 | 7,936 | 36.3 | 6,115 | 28.0 |
| Diploma | 56,814 | 100.0 | 2,509 | 4.4 | 12,705 | 22.4 | 20,575 | 36.2 | 21,025 | 37.0 |
| Baccalaureate in nursing | 13,281 | 100.0 | 696 | 5.2 | 3,252 | 24.5 | 3,852 | 29.0 | 5,480 | 41.3 |
| Baccalaureate in related area, masters, or Doctorate | 7,227 | 100.0 | 349(•) | 4.8(•) | 1,952 | 27.0 | 1,929 | 26.7 | 2,997 | 41.5 |
| Unknown | 541(•) | 100.0(•) | 26(•) | 4.7(•) | 100(•) | 18.4(•) | 134(•) | 24.7(•) | 282(•) | 52.2(•) |
| **Position** | | | | | | | | | | |
| General nursing | 58,372 | 100.0 | 1,715 | 3.0 | 10,924 | 18.7 | 20,880 | 35.8 | 24,817 | 42.5 |
| Specialized nursing | 3,145 | 100.0 | 236(•) | 7.5(•) | 914 | 29.1 | 1,122 | 35.7 | 873(•) | 27.[illegible](•) |
| Nursing supervisor | 35,510 | 100.0 | 2,594 | 7.3 | 12,006 | 33.8 | 11,566 | 32.6 | 9,345 | 26.3 |
| Other | 1,363 | 100.0 | 215(•) | 15.8(•) | 195(•) | 14.3(•) | 455(•) | 33.4(•) | 497(•) | 36.5(•) |
| Unknown | 1,318 | 100.0 | 132(•) | 10.0(•) | 417(•) | 31.6(•) | 403(•) | 30.6(•) | 366(•) | 27.8(•) |
| **Weekly salary** | | | | | | | | | | |
| Less than $300 | 34,298 | 100.0 | 1,344 | 3.9 | 8,219 | 24.0 | 12,246 | 35.7 | 12,490 | 36.4 |
| 300.00 to 399.99 | 25,679 | 100.0 | 1,125 | 4.4 | 5,995 | 23.3 | 10,001 | 38.9 | 8,558 | 33.3 |
| 400.00 to 499.99 | 17,250 | 100.0 | 1,001 | 5.8 | 4,680 | 27.1 | 5,413 | 31.4 | 6,156 | 35.0 |
| 500.00 and over | 11,214 | 100.0 | 742 | 6.6 | 2,492 | 22.2 | 3,091 | 27.6 | 4,889 | 43.6 |
| Unknown | 11,226 | 100.0 | 715 | 6.3 | 3,071 | 27.3 | 3,675 | 32.6 | 3,807 | 33.8 |

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Table D-20. (continued).

| | Total | | Less than .100 | | .100 to .299 | | .300 to .499 | | .500 or more | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | RN hours per inpatient day | | | | | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard Errors** | | | | | | | | | | |
| Total.......... | 3090 | 0.0 | 789 | 0.8 | 1,349 | 1.5 | 2,010 | 2.0 | 3,131 | 2.4 |
| **Age** | | | | | | | | | | |
| Under 35 years....... | 1,224 | 0.0 | 359 | 1.0 | 520 | 2.4 | 812 | 3.1 | 873 | 3.2 |
| 35 to 44............. | 1,204 | 0.0 | 343 | 1.3 | 557 | 2.2 | 886 | 2.8 | 977 | 3.0 |
| 45 to 54............. | 1,492 | 0.0 | 207 | 0.8 | 543 | 2.1 | 809 | 2.8 | 1,304 | 3.4 |
| 55 to 64............. | 1,251 | 0.0 | 183 | 0.9 | 486 | 2.4 | 649 | 2.9 | 1,094 | 3.6 |
| 65 and over.. ...... | 497 | 0.0 | 59 | 1.8 | 166 | 4.6 | 212 | 5.6 | 428 | 7.6 |
| Unknown............. | 190 | 0.0 | 10 | 1.2 | 141 | 11.8 | 126 | 11.7 | 54 | 6.2 |
| **Highest educational preparation** | | | | | | | | | | |
| Associate degree.... | 1,206 | 0.0 | 246 | 1.1 | 530 | 2.5 | 773 | 3.0 | 905 | 3.3 |
| Diploma............. | 2255 | 0.0 | 515 | 0.9 | 858 | 1.7 | 1,447 | 2.3 | 2,040 | 2.7 |
| Baccalaureate in nursing......... | 1,022 | 0.0 | 197 | 1.5 | 341 | 2.8 | 470 | 3.4 | 888 | 4.5 |
| Baccalaureate in related area, masters or doctorate......... | 747 | 0.0 | 103 | 1.5 | 325 | 4.3 | 322 | 4.2 | 617 | 5.8 |
| Unknown............. | 153 | 0.0 | 20 | 3.0 | 42 | 8.1 | 70 | 11.0 | 120 | 13.9 |
| **Position** | | | | | | | | | | |
| General nursing..... | 2,539 | 0.0 | 495 | 0.9 | 846 | 1.0 | 1,420 | 2.4 | 2,368 | 2.8 |
| Specialized nursing........... | 399 | 0.0 | 101 | 3.1 | 162 | 5.1 | 226 | 6.1 | 281 | 7.0 |
| Nursing supervisor............. | 1,271 | 0.0 | 304 | 0.9 | 764 | 2.1 | 902 | 2.2 | 1,003 | 2.4 |
| Other............... | 281 | 0.0 | 93 | 5.0 | 72 | 5.4 | 183 | 10.4 | 185 | 10.4 |
| Unknown............. | 300 | 0.0 | 90 | 6.6 | 113 | 9.1 | 166 | 10.9 | 225 | 13.3 |
| **Weekly salary** | | | | | | | | | | |
| Less than $300...... | 1,054 | 0.0 | 335 | 1.0 | 651 | 2.1 | 991 | 2.8 | 1,660 | 3.5 |
| $300 to $399.99..... | 1,289 | 0.0 | 317 | 1.2 | 441 | 1.9 | 861 | 2.8 | 999 | 3.0 |
| $400 to $499.99..... | 1,063 | 0.0 | 236 | 1.4 | 487 | 2.7 | 545 | 2.9 | 863 | 3.7 |
| $500 and over....... | 1,049 | 0.0 | 194 | 1.8 | 320 | 3.1 | 474 | 4.0 | 907 | 5.2 |
| Unknown............. | 835 | 0.0 | 182 | 1.6 | 361 | 3.1 | 513 | 3.8 | 601 | 4.1 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable becuse the relative standard error is more than 30 percent or the sample size is less than 25.

Table D-27. Number and percent of nursing homes by selected structural characteristics and level of RN employment.

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total....... | 19,070 | 100.0 | 9,282(**) | 48.7 | 5,608 | 29.4 | 2,053 | 10.8 | 2,127(*) | 11.2(*) |
| **Ownership** | | | | | | | | | | |
| Proprietary...... | 14,298 | 100.0 | 7,616 | 53.3 | 3,697 | 25.9 | 1,168 | 8.2 | 1,819(*) | 12.7(*) |
| Nonprofit........ | 3,758 | 100.0 | 1,166 | 31.0 | 1,489 | 39.6 | 794 | 21.1 | 309(*) | 8.2(*) |
| Government....... | 1,014 | 100.0 | 501 | 49.4 | 422 | 41.6 | 91(*) | 9.0(*) | 0(*) | 0.0(*) |
| **Affiliation** | | | | | | | | | | |
| Independent.. .. | 10,038 | 100.0 | 4,157 | 41.4 | 2,603 | 25.9 | 1,200 | 12.0 | 2,078(*) | 20.7(*) |
| Chain-small...... | 3,253 | 100.0 | 1,764 | 54.2 | 1,026 | 31.5 | 413 | 12.7 | 50(*) | 1.5(*) |
| Chain-medium.... | 2,218 | 100.0 | 1,410 | 63.6 | 603 | 27.2 | 205(*) | 9.2(*) | 0(*) | 0.0(*) |
| Chain-large...... | 2,054 | 100.0 | 1,107 | 53.9 | 811 | 39.5 | 136(*) | 6.6(*) | 0(*) | 0.0(*) |
| Government....... | 1,014 | 100.0 | 501 | 49.4 | 422 | 41.6 | 91 | 8.9 | 0(*) | 0.0(*) |
| Unknown.......... | 492 | 100.0 | 343 | 69.7 | 144(*) | 29.3(*) | 5(*) | 1.0(*) | 0(*) | 0.0(*) |
| **Available beds** | | | | | | | | | | |
| 50 or less ...... | 6,983 | 100.0 | 3,460 | 49.5 | 947(*) | 13.6(*) | 547(*) | 7.8(*) | 2,030(*) | 29.1(*) |
| 51 to 99......... | 5,564 | 100.0 | 2,940 | 52.8 | 1,868 | 33.6 | 678 | 12.2 | 78(*) | 1.4(*) |
| 100 to 149....... | 3,900 | 100.0 | 1,921 | 49.3 | 1,578 | 40.4 | 402 | 10.3 | 0(*) | 0.0(*) |
| 150 to 199....... | 1,435 | 100.0 | 571 | 39.8 | 655 | 45.7 | 209 | 14.6 | 0(*) | 0.0(*) |
| 200 and over.... | 1,187 | 100.0 | 390 | 32.9 | 560 | 47.2 | 217 | 18.3 | 20(*) | 1.7(*) |
| **Number of services** | | | | | | | | | | |
| Less than 11.... | 4,978 | 100.0 | 2,164 | 43.5 | 845 | 17.0 | 296(*) | 5.9(*) | 1,673(*) | 33.6(*) |
| 11 to 12......... | 4,256 | 100.0 | 2,302 | 54.1 | 1,204 | 28.3 | 295(*) | 6.9(*) | 455(*) | 10.7(*) |
| 13 to 14......... | 7,039 | 100.0 | 3,521 | 50.0 | 2,527 | 35.9 | 992 | 14.1 | 0(*) | 0.0(*) |
| 15 or more....... | 2,797 | 100.0 | 1,294 | 46.3 | 1,033 | 36.9 | 470 | 16.8 | 0(*) | 0.0(*) |

(continued)

Table D-27. (continued).

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Certification** | | | | | | | | | | |
| Skilled nursing only...... | 2,530 | 100.0 | 987 | 39.0 | 1,019 | 40.3 | 522 | 20.6 | 1(*) | 0.0(*) |
| Skilled and intermediate.. | 5,721 | 100.0 | 1,989 | 34.8 | 2,868 | 50.1 | 864 | 15.1 | 0(*) | 0.0(*) |
| Intermediate care only..... | 5,206 | 100.0 | 3,690 | 70.9 | 1,163 | 2.3 | 338(*) | 6.5(*) | 16(*) | 0.3(*) |
| Neither......... | 4,652 | 100.0 | 2,330 | 50.1 | 435(*) | 9.4(*) | 316(*) | 6.8(*) | 1,571(*) | 33.8(*) |
| Unknown......... | 961(*) | 100.0(*) | 286(*) | 29.8(*) | 123(*) | 12.8(*) | 12(*) | 1.3(*) | 539(*) | 56.1(*) |
| **MD availability** | | | | | | | | | | |
| MD on premises at all times..... | 281 | 100.0 | 18(*) | 6.5(*) | 75(*) | 26.7(*) | 187(*) | 66.7(*) | 0(*) | 0.0(*) |
| MD on premises weekdays...... | 1,210 | 100.0 | 454 | 37.5 | 579 | 47.8 | 177(*) | 14.6(*) | 0(*) | 0.0(*) |
| MD on premises at scheduled times | 9,204 | 100.0 | 4,696 | 51.0 | 3,420 | 37.2 | 904 | 9.8 | 184(*) | 2.0(*) |
| MD on call only. | 5,735 | 100.0 | 3,316 | 57.8 | 1,153 | 20.1 | 460 | 8.0 | 807(*) | 14.1(*) |
| Other........... | 1,906 | 100.0 | 438(*) | 23.0(*) | 158(*) | 8.3(*) | 175(*) | 9.2(*) | 1,135(*) | 59.6(*) |
| Unknown......... | 733 | 100.0 | 359(*) | 49.1(*) | 224(*) | 30.6(*) | 149(*) | 20.4(*) | 0(*) | 0.0(*) |
| **Standard Errors** | | | | | | | | | | |
| Total...... | 5,878 | 0.0 | 434 | 2.8 | 308 | 1.8 | 218 | 1.2 | 708 | 3.4 |
| **Ownership** | | | | | | | | | | |
| Proprietary..... | 668 | 0.0 | 434 | 3.6 | 261 | 2.0 | 173 | 1.2 | 697 | 4.4 |
| Nonprofit....... | 344 | 0.0 | 176 | 4.4 | 192 | 4.7 | 137 | 3.5 | 226 | 5.6 |
| Government...... | 149 | 0.0 | 121 | 7.7 | 88 | 7.4 | 33 | 3.2 | 0 | 0.0 |

(continued)

Table D-27. (continued).

| | | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Affiliation** | | | | | | | | | | |
| Independent..... | 880 | 0.0 | 393 | 4.5 | 259 | 2.9 | 182 | 1.9 | 707 | 8.0 |
| Chain-small..... | 242 | 0.0 | 199 | 4.1 | 125 | 3.5 | 97 | 2.8 | 37 | 1.1 |
| Chain-medium.... | 224 | 0.0 | 197 | 4.9 | 104 | 4.4 | 65 | 2.8 | 0 | 0.0 |
| Chain-large..... | 175 | 0.0 | 134 | 4.5 | 115 | 4.4 | 43 | 2.0 | 0 | 0.0 |
| Government...... | 149 | 0.0 | 121 | 7.7 | 88 | 7.4 | 33 | 3.2 | 0 | 0.0 |
| Unknown......... | 177 | 0.0 | 144 | 6.1 | 1C8 | 5.9 | 34 | 2.2 | 0 | 0.0 |
| **Available beds** | | | | | | | | | | |
| 50 or less ..... | 641 | 0.0 | 403 | 7.0 | 202 | 3.1 | 161 | 2.4 | 707 | 8.0 |
| 51 to 99........ | 196 | 0.0 | 208 | 3.3 | 199 | 3.2 | 117 | 2.1 | 45 | 0.8 |
| 100 to 149...... | 165 | 0.0 | 149 | 3.1 | 128 | 3.0 | 75 | 1.9 | 0 | 0.0 |
| 150 to 199...... | 99 | 0.0 | 74 | 4.1 | 71 | 4.1 | 42 | 2.9 | 0 | 0.0 |
| 200 and over.... | 45 | 0.0 | 39 | 3.3 | 52 | 3.6 | 32 | 2.7 | 14 | 1.2 |
| **Number of services** | | | | | | | | | | |
| Less than 11.... | 729 | 0.0 | 351 | 8.0 | 196 | 4.4 | 113 | 2.4 | 704 | 10.3 |
| 11 to 12........ | 349 | 0.0 | 236 | 4.7 | 148 | 3.5 | 92 | 2.1 | 233 | 5.0 |
| 13 to 14........ | 421 | 0.0 | 381 | 3.4 | 207 | 3.0 | 138 | 2.0 | 0 | 0.0 |
| 15 or more...... | 277 | 0.0 | 232 | 5.2 | 126 | 4.5 | 101 | 3.5 | 0 | 0.0 |
| **Certification** | | | | | | | | | | |
| Skilled nursing only....... | 221 | 0.0 | 154 | 4.7 | 142 | 4.6 | 105 | 3.8 | 1 | 0.0 |
| Skilled and intermediate... | 244 | 0.0 | 170 | 2.6 | 196 | 2.7 | 18 | 1.9 | 0 | 0.0 |
| Intermediate care only...... | 279 | 0.0 | 260 | 3.4 | 173 | 3.1 | 105 | 2.0 | 16 | 0.3 |
| Neither......... | 702 | 0.0 | 394 | 9.8 | 134 | 3.1 | 121 | 2.7 | 708 | 11.4 |
| Unknown......... | 291 | 0.0 | 134 | 13.2 | 110 | 10.9 | 9 | 1.0 | 251 | 15.8 |

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Table D-27. (continued).

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| MD availability | | | | | | | | | | |
| MD on premises at all times..... | 66 | 0.0 | 14 | 5.1 | 25 | 10.2 | 82 | 11.8 | 0 | 0.0 |
| MD on premises weekdays...... | 210 | 0.0 | 171 | 9.7 | 117 | 8.7 | 45 | 4.1 | 0 | 0.0 |
| MD on premises at scheduled times | 365 | 0.0 | 320 | 2.6 | 242 | 2.4 | 137 | 1.5 | 113 | 2.0 |
| MD on call only. | 505 | 0.0 | 395 | 5.0 | 190 | 3.3 | 122 | 2.1 | 324 | 5.1 |
| Other........... | 698 | 0.0 | 126 | 9.7 | 60 | 4.2 | 77 | 5.0 | 678 | 15.2 |
| Unknown......... | 138 | 0.0 | 116 | 9.6 | 57 | 7.6 | 51 | 6.6 | 0 | 0.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: All nursing homes included in the National Nursing Home Survey.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes 3,554 facilities that reported no registered nurse employees.

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Table D-28. Number and percent of nursing homes by selected nursing home staffing characteristics and level of RN employment.

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 19,070 | 100.0 | 9,282(**) | 48.7 | 5,608 | 29.4 | 2,053 | 10.8 | 2,127(*) | 11.2(*) |
| **Full-time equivalent RNs** | | | | | | | | | | |
| 0............. | 5,681 | 100.0 | 3,554 | 62.6 | 0(*) | 0.0(*) | 0(*) | 0.0(*) | 2,127(*) | 37.4(*) |
| >0 to <2...... | 2,533 | 100.0 | 2,111 | 83.4 | 254(*) | 10.0(*) | 167(*) | 6.6(*) | 0(*) | 0.0(*) |
| 2 to <5....... | 4,509 | 100.0 | 2,683 | 59.5 | 1,584 | 35.1 | 242(*) | 5.4(*) | 0(*) | 0.0(*) |
| 5 to <10...... | 3,988 | 100.0 | 807 | 20.2 | 2,459 | 61.6 | 722 | 18.1 | 0(*) | 0.0(*) |
| ≥10........... | 2,359 | 100.0 | 127 | 5.4 | 1,311 | 55.6 | 921 | 39.0 | 0(*) | 0.0(*) |
| **LPN hours per inpatient day** | | | | | | | | | | |
| Less than .300......... | 7,842 | 100.0 | 3,131 | 39.9 | 1,667 | 21.3 | 1,146 | 14.6 | 1,898(*) | 24.2(*) |
| .300 to .499.. | 5,455 | 100.0 | 2,617 | 48.0 | 2,182 | 40.0 | 427 | 7.8 | 229(*) | 4.2(*) |
| .500 to .699.. | 3,566 | 100.0 | 2,339 | 65.6 | 1,022 | 28.7 | 205(*) | 5.7(*) | 0(*) | 0.0(*) |
| .700 or more.. | 2,208 | 100.0 | 1,195 | 54.1 | 737 | 33.4 | 276(*) | 12.5(*) | 0(*) | 0.0(*) |
| **Aide hours per inpatient day** | | | | | | | | | | |
| Less than 1.4. | 6,630 | 100.0 | 3,043 | 45.9 | 1,014 | 15.3 | 675 | 10.2 | 1,898(*) | 28.6(*) |
| 1.4 to 1.7.... | 4,105 | 100.0 | 2,211 | 53.9 | 1,383 | 33.7 | 282 | 6.9 | 229(*) | 5.6(*) |
| 1.8 to 2.1.... | 4,581 | 100.0 | 2,271 | 49.6 | 1,599 | 34.9 | 710 | 15.5 | 0(*) | 0.0(*) |
| 2.2 or more... | 3,754 | 100.0 | 1,757 | 46.8 | 1,612 | 43.0 | 385 | 10.2 | 0(*) | 0.0(*) |

(continued)

Table D-28. (continued).

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | |
| Total.... | 587 | 0.0 | 434 | 2.8 | 308 | 1.8 | 216 | 1.2 | 708 | 3.4 |
| **Full-time equivalent RNs** | | | | | | | | | | |
| 0............. | 682 | 0.0 | 399 | 9.0 | 0 | 0.0 | 0 | 0.0 | 708 | 9.0 |
| >0 to <2...... | 278 | 0.0 | 399 | 9.0 | 0 | 0.0 | 0 | 0.0 | 708 | 0.0 |
| 2 to <5....... | 287 | 0.0 | 218 | 3.7 | 208 | 3.8 | 96 | 2.1 | 0 | 0.0 |
| 5 to <10...... | 241 | 0.0 | 86 | 2.2 | 205 | 3.3 | 132 | 2.9 | 0 | 0.0 |
| ≥10........... | 142 | 0.0 | 28 | 1.2 | 98 | 3.5 | 114 | 3.5 | 0 | 0.0 |
| **LPN hours per inpatient day** | | | | | | | | | | |
| Less than .300 | 703 | 0.0 | 374 | 5.3 | 197 | 2.9 | 179 | 2.5 | 695 | 7.2 |
| .300 to .499.. | 348 | 0.0 | 223 | 3.5 | 185 | 3.2 | 85 | 1.5 | 214 | 3.8 |
| .500 to .699.. | 287 | 0.0 | 268 | 4.0 | 147 | 3.8 | 56 | 1.6 | 0 | 0.0 |
| .700 or more.. | 244 | 0.0 | 178 | 6.0 | 162 | 5.8 | 88 | 3.8 | 0 | 0.0 |
| **Aide hours per inpatient day** | | | | | | | | | | |
| Less than 1.4. | 728 | 0.0 | 402 | 6.5 | 172 | 2.9 | 150 | 2.4 | 695 | 8.2 |
| 1.4 to 1.7.... | 371 | 0.0 | 269 | 4.8 | 153 | 3.9 | 64 | 1.6 | 214 | 4.9 |
| 1.8 to 2.1.... | 313 | 0.0 | 260 | 3.4 | 176 | 3.5 | 130 | 2.7 | 0 | 0.0 |
| 2.2 or more... | 290 | 0.0 | 219 | 4.2 | 198 | 4.2 | 85 | 2.2 | 0 | 0.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: All nursing homes included in the National Nursing Home Survey.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes 3,554 facilities that reported no registered nurse employees.

Table D-29. Number and percent of nursing homes by state RN requirement for highest level of care offered and level of RN employment.

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total...... | 19,070 | 100.0 | 9,282(**) | 48.7 | 5,608 | 29.4 | 2,052 | 10.8 | 2,127(*) | 11.2(*) |
| **State RN requirement** | | | | | | | | | | |
| RN on all shifts. | 1,062 | 100.0 | 261 | 24.6 | 523 | 49.2 | 278 | 26.2 | 0(*) | 0.0(*) |
| One full-time RN and director of nursing........ | 2,217 | 100.0 | 634 | 28.6 | 1,226 | 55.3 | 356 | 16.1 | 0(*) | 0.0(*) |
| Full-time RN..... | 2,607 | 100.0 | 756 | 29.0 | 1,140 | 43.7 | 597 | 22.9 | 114(*) | 4.4(*) |
| Director of nursing is RN.. | 3,314 | 100.0 | 2,084 | 62.9 | 884 | 26.7 | 251(*) | 7.6(*) | 95(*) | 2.9(*) |
| No full-time RN requirement.... | 9,869 | 100.0 | 5,546 | 56.2 | 1,834 | 18.6 | 570 | 5.7 | 1,918(*) | 19.4(*) |
| **Standard errors** | | | | | | | | | | |
| Total...... | 587 | 0.0 | 434 | 2.8 | 308 | 1.8 | 216 | 1.2 | 708 | 3.4 |
| **State RN requirement** | | | | | | | | | | |
| RN on all shifts. | 112 | 0.0 | 61 | 5.0 | 78 | 5.6 | 62 | 5.0 | 0 | 0.0 |
| One full-time RN and director of nursing........ | 169 | 0.0 | 94 | 3.7 | 129 | 4.1 | 77 | 3.2 | 0 | 0.0 |
| Full-time RN..... | 224 | 0.0 | 120 | 4.1 | 136 | 4.4 | 116 | 3.9 | 93 | 3.4 |
| Director of nursing is RN.. | 267 | 0.0 | 211 | 4.5 | 141 | 3.8 | 83 | 2.4 | 95 | 2.8 |
| No full-time RN requirement.... | 670 | 0.0 | 425 | 5.3 | 242 | 2.6 | 144 | 1.5 | 714 | 6.3 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: Current residents in nursing homes.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes 3,554 facilities that reported no registered nurse employees.

Table D-30. Number and percent of current nursing home residents by selected characteristics and the level of RN employment in the nursing home of residence.

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.. | 1,491,446 | 100.0 | 679,750(**) | 45.6 | 583,254 | 39.1 | 195,899 | 13.1 | 32,542 | 2.2 |
| **Age** | | | | | | | | | | |
| Under 65 years | 163,266 | 100.0 | 71,163 | 43.6 | 51,846 | 31.8 | 24,762 | 15.2 | 15,495 | 9.5 |
| 65 to 74....... | 205,583 | 100.0 | 105,457 | 51.3 | 70,281 | 34.2 | 22,902 | 11.1 | 6,943(*) | 3.4(*) |
| 75 to 84....... | 484,701 | 100.0 | 229,990 | 47.4 | 185,788 | 38.3 | 64,496 | 13.3 | 4,428(*) | 0.9(*) |
| 85 and older .. | 635,551 | 100.0 | 272,143 | 42.8 | 275,128 | 43.3 | 83,739 | 13.2 | 4,541(*) | 0.7(*) |
| Unknown........ | 2,346(*) | 100.0(*) | 997(*) | 42.5(*) | 212(*) | 9.0(*) | 0(*) | 0.0(*) | 1,136(*) | 48.4(*) |
| **Race** | | | | | | | | | | |
| White......... | 1,374,620 | 100.0 | 602,437 | 43.8 | 557,046 | 40.5 | 185,735 | 13.5 | 29,402 | 2.1 |
| Nonwhite....... | 109,637 | 100.0 | 73,610 | 67.1 | 25,186 | 23.0 | 8,528 | 7.8 | 2,314(*) | 2.1(*) |
| Unknown........ | 7,190(*) | 100.0(*) | 3,704(*) | 51.5(*) | 1,023(*) | 14.2(*) | 1,636(*) | 22.8(*) | 827(*) | 11.5(*) |
| **Marital status** | | | | | | | | | | |
| Married........ | 188,221 | 100.0 | 89,116 | 47.3 | 71,368 | 37.9 | 15,417 | 13.5 | 2,320(*) | 1.2(*) |
| Previously married.... | 1,000,592 | 100.0 | 454,836 | 45.5 | 402,478 | 40.2 | 129,503 | 12.9 | 13,775 | 1.4 |
| Never married.. | 271,416 | 100.0 | 120,666 | 44.5 | 100,524 | 37.0 | 36,160 | 13.3 | 14,067 | 5.2 |
| Unknown........ | 31,217 | 100.0 | 15,133 | 48.5 | 8,884 | 28.5 | 4,820(*) | 15.4(*) | 2,381(*) | 7.6(*) |
| **Living children** | | | | | | | | | | |
| Yes............ | 886,218 | 100.0 | 391,609 | 44.2 | 360,003 | 40.6 | 124,402 | 14.0 | 10,205 | 1.2 |
| No............. | 526,561 | 100.0 | 249,165 | 47.3 | 195,203 | 37.1 | 62,942 | 12.0 | 19,250 | 3.7 |
| Unknown........ | 78,667 | 100.0 | 38,977 | 49.5 | 28,048 | 35.7 | 8,555 | 10.9 | 3,087(*) | 3.9(*) |

(continued)

Table D-30. (continued).

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | |
| Total...... | 16,891 | 0.0 | 24,800 | 1.6 | 25,470 | 1.6 | 16,460 | 1.1 | 7,568 | 0.5 |
| **Age** | | | | | | | | | | |
| Under 65 years.. | 9,538 | 0.0 | 6,384 | 3.3 | 5,823 | 3.1 | 4,669 | 2.6 | 4,362 | 2.6 |
| 65 to 74........ | 8,103 | 0.0 | 6,935 | 2.5 | 5,316 | 2.3 | 3,024 | 1.4 | 2,265 | 1.1 |
| 75 to 84........ | 12,319 | 0.0 | 11,270 | 2.0 | 10,547 | 1.9 | 6,632 | 1.3 | 1,814 | 0.4 |
| 85 and older.... | 13,689 | 0.0 | 12,265 | 1.8 | 14,175 | 1.9 | 8,178 | 1.3 | 1,773 | 0.3 |
| Unknown......... | 1,023 | 0.0 | 524 | 20.5 | 212 | 9.1 | 0 | 0.0 | 852 | 22.1 |
| **Race** | | | | | | | | | | |
| White........... | 17,480 | 0.0 | 22,670 | 1.6 | 24,815 | 1.6 | 15,715 | 1.1 | 7,082 | 0.5 |
| Nonwhite........ | 10,011 | 0.0 | 9,029 | 4.2 | 4,230 | 3.7 | 2,346 | 2.1 | 1,379 | 1.2 |
| Unknown......... | 1,825 | 0.0 | 1,071 | 13.0 | 608 | 8.0 | 1,227 | 13.9 | 592 | 7.8 |
| **Marital status** | | | | | | | | | | |
| Married......... | 7,720 | 0.0 | 6,306 | 2.6 | 5,204 | 2.5 | 3,431 | 1.7 | 1,441 | 0.8 |
| Previously married....... | 17,237 | 0.0 | 18,101 | 1.7 | 20,338 | 1.8 | 11,420 | 1.1 | 3,619 | 0.4 |
| Never married... | 10,887 | 0.0 | 8,281 | 2.5 | 7,261 | 2.4 | 4,906 | 1.7 | 4,478 | 1.6 |
| Unknown......... | 3,882 | 0.0 | 2,690 | 6.4 | 2,146 | 5.8 | 1,481 | 4.4 | 1,313 | 4.0 |
| **Living children** | | | | | | | | | | |
| Yes............. | 15,997 | 0.0 | 15,951 | 1.7 | 18,103 | 1.8 | 11,265 | 1.2 | 2,877 | 0.3 |
| No.............. | 12,893 | 0.0 | 12,237 | 2.0 | 10,852 | 1.9 | 6,514 | 1.2 | 4,801 | 0.9 |
| Unknown......... | 6,050 | 0.0 | 4,704 | 4.2 | 3,521 | 3.9 | 1,931 | 2.4 | 1,497 | 1.9 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: Current residents in nursing homes.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes residents in facilities that reported no registered nurse employees.

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Table D-31. Number and percent of current nursing home residents by patient stay characteristics and the level of RN employment in the nursing home of residence.

| | RNs as percentage of nursing staff | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total... | 1,491,446 | 100.0 | 679,750(**) | 45.6 | 583,254 | 39.1 | 195,899 | 13.1 | 32,542 | 2.2 |
| **Length of current stay** | | | | | | | | | | |
| Less than 1 year | 543,599 | 100.0 | 241,458 | 44.4 | 218,103 | 40.1 | 74,448 | 13.7 | 9,591 | 1.8 |
| 1 year but less than 2........ | 284,646 | 100.0 | 128,932 | 45.3 | 115,011 | 40.4 | 35,318 | 12.4 | 5,385(*) | 1.9(*) |
| 2 years but less than 3........ | 185,044 | 100.0 | 78,478 | 42.4 | 74,552 | 40.3 | 25,796 | 13.9 | 6,218(*) | 3.4(*) |
| 3 years but less than 4........ | 118,002 | 100.0 | 52,333 | 44.3 | 46,089 | 39.1 | 16,362 | 13.9 | 3,218(*) | 2.7(*) |
| 4 years or more | 360,154 | 100.0 | 178,550 | 49.6 | 129,499 | 36.0 | 43,975 | 12.2 | 8,131(*) | 2.3(*) |
| **Source of payment for first month** | | | | | | | | | | |
| Own income..... | 659,186 | 100.0 | 275,424 | 41.8 | 269,754 | 40.9 | 96,924 | 14.7 | 17,085 | 2.6 |
| Medicare....... | 60,506 | 100.0 | 19,640 | 32.5 | 27,070 | 44.7 | 13,797 | 22.8 | 0(*) | 0.0(*) |
| Medicaid....... | 572,709 | 100.0 | 290,507 | 50.7 | 221,210 | 38.6 | 59,208 | 10.3 | 1,785(*) | 0.3(*) |
| Other government | 69,184 | 100.0 | 33,932 | 49.0 | 16,118 | 23.3 | 7,555(*) | 10.9(*) | 11,579(*) | 16.7(*) |
| Other sources.. | 22,673 | 100.0 | 6,404(*) | 28.2(*) | 10,630 | 46.9 | 4,549(*) | 20.1(*) | 1,090(*) | 4.8(*) |
| Unknown........ | 107,187 | 100.0 | 53,843 | 50.2 | 38,473 | 35.9 | 13,867 | 12.9 | 1,004(*) | 0.9(*) |

(continued)

Table D-31. (continued).

|  | Total |  | RNs as percentage of nursing staff |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | 0 to 9% |  | 10 to 19% |  | 20% or more |  | No nursing staff |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Standard errors |  |  |  |  |  |  |  |  |  |  |
| Total...... | 16,691 | 0.0 | 24,800 | 1.6 | 25,470 | 1.6 | 16,460 | 1.1 | 7,568 | 0.5 |
| Length of current stay |  |  |  |  |  |  |  |  |  |  |
| Less than 1 year | 13,438 | 0.0 | 11,758 | 1.9 | 12,422 | 2.0 | 7,449 | 1.3 | 2,734 | 0.5 |
| 1 year but less than 2......... | 9,742 | 0.0 | 8,208 | 2.3 | 7,222 | 2.2 | 4,217 | 1.4 | 1,888 | 0.7 |
| 2 years but less than 3......... | 7,456 | 0.0 | 5,361 | 2.4 | 5,629 | 2.5 | 3,204 | 1.7 | 2,060 | 1.1 |
| 3 years but less than 4......... | 6,448 | 0.0 | 4,907 | 3.2 | 4,020 | 3.0 | 2,870 | 2.3 | 1,335 | 1.1 |
| 4 years or more. | 12,454 | 0.0 | 10,275 | 2.3 | 9,441 | 2.2 | 5,470 | 1.5 | 2,557 | 0.7 |
| Source of payment for first month |  |  |  |  |  |  |  |  |  |  |
| Own income...... | 18,564 | 0.0 | 14,038 | 2.0 | 17,001 | 2.1 | 10,319 | 1.5 | 5,604 | 0.8 |
| Medicare........ | 5,712 | 0.0 | 3,199 | 4.6 | 3,468 | 4.9 | 3,630 | 5.0 | 0 | 0.0 |
| Medicaid........ | 16,397 | 0.0 | 15,232 | 2.1 | 12,486 | 2.0 | 7,533 | 1.3 | 1,222 | 0.2 |
| Other government | 7,738 | 0.0 | 5,854 | 6.2 | 2,643 | 3.9 | 2,246 | 3.2 | 4,590 | 5.9 |
| Other sources... | 4,936 | 0.0 | 1,635 | 7.8 | 4,331 | 11.3 | 4,549 | 7.2 | 1,090 | 3.0 |
| Unknown......... | 6,198 | 0.0 | 4,815 | 3.3 | 4,051 | 3.1 | 2,260 | 2.0 | 703 | 0.7 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: Current residents in nursing homes.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.
**Includes residents in facilities that reported no registered nurse employees.

Table D-32. Number and percent of current nursing home residents by selected health status measures and the level of RN employment in the nursing home of residence.

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.. | 1,491,446 | 100.0 | 679,750(**) | 45.6 | 583,254 | 39.1 | 195,899 | 13.1 | 32,542 | 2.2 |
| **Physical health** | | | | | | | | | | |
| Excellent...... | 40,727 | 100.0 | 18,206 | 44.7 | 17,278 | 42.4 | 2,767(*) | 6.8(*) | 2,477(*) | 6.1(*) |
| Good........... | 531,098 | 100.0 | 224,989 | 42.4 | 213,972 | 40.3 | 74,184 | 14.0 | 17,953 | 3.4 |
| Fair........... | 643,513 | 100.0 | 305,582 | 47.5 | 247,181 | 38.4 | 79,995 | 12.4 | 10,756 | 1.7 |
| Poor........... | 238,938 | 100.0 | 19,228 | 49.9 | 87,976 | 36.8 | 31,189 | 13.1 | 545(*) | 0.2(*) |
| Unknown........ | 37,170 | 100.0 | 11,746 | 31.6 | 16,847 | 45.3 | 7,764 | 20.9 | 812(*) | 2.2(*) |
| **Mental health** | | | | | | | | | | |
| Excellent...... | 53,464 | 100.0 | 23,290 | 43.6 | 22,548 | 42.2 | 5,320(*) | 10.0(*) | 1,284(*) | 4.3(*) |
| Good........... | 404,098 | 100.0 | 175,666 | 43.5 | 160,189 | 39.6 | 55,083 | 13.6 | 13,160 | 3.3 |
| Fair........... | 554,403 | 100.0 | 254,935 | 46.0 | 219,549 | 39.6 | 67,797 | 12.2 | 12,123 | 2.2 |
| Poor........... | 428,972 | 100.0 | 211,384 | 49.3 | 155,982 | 36.4 | 57,454 | 13.4 | 4,152(*) | 1.0(*) |
| Unknown........ | 50,511 | 100.0 | 14,476 | 28.7 | 24,986 | 49.5 | 10,238 | 20.3 | 812(*) | 1.6(*) |
| **Number of behavioral problems** | | | | | | | | | | |
| None........... | 906,181 | 100.0 | 407,851 | 45.0 | 355,927 | 39.3 | 115,798 | 12.8 | 26,605 | 2.9 |
| Few............ | 459,587 | 100.0 | 214,391 | 46.6 | 174,605 | 38.0 | 65,662 | 14.3 | 4,931(*) | 1.1(*) |
| Some/Many...... | 113,019 | 100.0 | 54,074 | 47.8 | 47,625 | 42.1 | 10,313 | 9.1 | 1,006(*) | 1.0(*) |
| Unknown........ | 12,658 | 100.0 | 3,435(*) | 27.1(*) | 5,098(*) | 40.3(*) | 4,126(*) | 32.6(*) | 0(*) | 0.0(*) |
| **Memory difficulties** | | | | | | | | | | |
| None........... | 550,849 | 100.0 | 226,668 | 41.1 | 223,636 | 40.6 | 82,075 | 14.9 | 18,470 | 3.4 |
| Some........... | 285,277 | 100.0 | 144,225 | 50.6 | 103,855 | 36.4 | 28,439 | 10.0 | 8,757 | 3.1 |
| Much........... | 637,267 | 100.0 | 304,168 | 47.7 | 247,771 | 38.9 | 80,013 | 12.6 | 5,315(*) | 0.8(*) |
| Unknown........ | 18,054 | 100.0 | 4,690(*) | 26.0(*) | 7,992 | 44.3 | 5,372(*) | 29.8(*) | 0(*) | 0.0(*) |

(continued)

Table D 32. (continued).

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Standard errors** | | | | | | | | | | |
| Total...... | 16,691 | 0.0 | 24,800 | 1.6 | 25,470 | 1.6 | 16,460 | 1.1 | 7,568 | 0.5 |
| **Physical health** | | | | | | | | | | |
| Excellent....... | 4,931 | 0.0 | 3,651 | 6.6 | 3,374 | 6.5 | 1,295 | 3.1 | 1,009 | 2.5 |
| Good............ | 15,245 | 0.0 | 12,248 | 2.1 | 12,866 | 2.1 | 8,469 | 1.5 | 5,225 | 1.0 |
| Fair............ | 14,336 | 0.0 | 14,228 | 1.9 | 12,678 | 1.8 | 7,742 | 1.2 | 4,055 | 0.6 |
| Poor............ | 9,807 | 0.0 | 7,861 | 2.6 | 6,985 | 2.5 | 4,253 | 1.7 | 545 | 0.2 |
| Unknown......... | 6,477 | 0.0 | 3,720 | 8.3 | 4,314 | 8.8 | 3,097 | 7.4 | 812 | 2.2 |
| **Mental health** | | | | | | | | | | |
| Excellent....... | 6,148 | 0.0 | 4,177 | 6.3 | 4,582 | 6.3 | 1,654 | 3.0 | 1,284 | 2.4 |
| Good............ | 12,362 | 0.0 | 9,904 | 2.2 | 9,847 | 2.1 | 6,292 | 1.5 | 4,652 | 1.1 |
| Fair............ | 13,746 | 0.0 | 12,601 | 2.0 | 11,918 | 1.9 | 7,010 | 1.2 | 4,162 | 0.7 |
| Poor............ | 12,206 | 0.0 | 10,818 | 2.1 | 9,598 | 2.0 | 6,177 | 1.4 | 2,101 | 0.5 |
| Unknown......... | 8,928 | 0.0 | 3,841 | 6.4 | 4,849 | 7.0 | 3,250 | 5.7 | 812 | 1.6 |
| **Number of behavioral problems** | | | | | | | | | | |
| None............ | 17,457 | 0.0 | 18,050 | 1.8 | 17,770 | 1.8 | 10,931 | 1.2 | 6,283 | 0.7 |
| Few............. | 14,155 | 0.0 | 10,919 | 2.2 | 12,247 | 2.2 | 7,153 | 1.5 | 2,135 | 0.5 |
| Some/Many....... | 6,332 | 0.0 | 4,682 | 3.2 | 4,609 | 3.2 | 1,956 | 1.7 | 714 | 0.6 |
| Unknown......... | 3,505 | 0.0 | 1,907 | 12.7 | 1,973 | 13.2 | 2,210 | 13.8 | 0 | 0.0 |
| **Memory difficulties** | | | | | | | | | | |
| None............ | 15,515 | 0.0 | 12,620 | 2.1 | 13,386 | 2.1 | 8,759 | 1.5 | 5,584 | 1.0 |
| Some............ | 9,959 | 0.0 | 8,271 | 2.3 | 7,205 | 2.2 | 3,806 | 1.3 | 3,307 | 1.1 |
| Much............ | 15,179 | 0.0 | 14,153 | 1.9 | 13,658 | 1.9 | 8,218 | 1.3 | 2,419 | 0.4 |
| Unknown......... | 4,088 | 0.0 | 2,246 | 10.5 | 2,520 | 11.2 | 2,347 | 10.7 | 0 | 0.0 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: Current residents in nursing homes.

NOTES: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

**Includes residents in facilities that reported no registered nurse employees.

Table D-33. Number and percent of RNs by selected nurse characteristics and level of RN employment in the place of employment.

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total..... | 99,707 | 100.0 | 19,889 | 19.9 | 50,814 | 51.0 | 28,974 | 29.1 | 31(*) | 0.0(*) |
| **Age** | | | | | | | | | | |
| Under 35 years. | 21,769 | 100.0 | 4,842 | 22.2 | 10,429 | 47.9 | 6,498 | 29.8 | 0(*) | 0.0(*) |
| 35 to 44....... | 25,253 | 100.0 | 5,114 | 20.3 | 12,496 | 49.5 | 7,642 | 30.3 | 0(*) | 0.0(*) |
| 45 to 54....... | 27,116 | 100.0 | 5,120 | 18.9 | 14,679 | 54.1 | 7,285 | 26.9 | 31(*) | 0.1(*) |
| 55 to 64....... | 21,193 | 100.0 | 3,862 | 18.2 | 10,944 | 51.6 | 6,387 | 30.1 | 0(*) | 0.0(*) |
| 65 and over.... | 3,536 | 100.0 | 684 | 19.3 | 1,741 | 49.3 | 1,110(*) | 31.4(*) | 0(*) | 0.0(*) |
| Unknown........ | 841 | 100.0 | 266(*) | 31.6(*) | 523(*) | 62.2(*) | 51(*) | 6.1(*) | 0(*) | 0.0(*) |
| **Highest educational preparation** | | | | | | | | | | |
| Associate degree | 21,843 | 100.0 | 5,629 | 25.8 | 11,521 | 52.7 | 4,693 | 21.5 | 0(*) | 0.0(*) |
| Diploma......... | 56,814 | 100.0 | 10,329 | 18.2 | 29,295 | 51.6 | 17,159 | 30.2 | 31(*) | 0.1(*) |
| Baccalaureate in nursing.... | 13,281 | 100.0 | 2,346 | 17.7 | 6,514 | 49.0 | 4,421 | 33.3 | 0(*) | 0.0(*) |
| Baccalaureate in related area, masters or doctorate..... | 7,227 | 100.0 | 1,423 | 19.7 | 3,303 | 45.7 | 2,502 | 34.6 | 0(*) | 0.0(*) |
| Unknown......... | 541(*) | 100.0(*) | 163(*) | 30.1(*) | 181(*) | 33.4(*) | 198(*) | 36.5(*) | 0(*) | 0.0(*) |
| **Position** | | | | | | | | | | |
| General nursing. | 58,372 | 100.0 | 7,153 | 12.3 | 30,614 | 52.4 | 20,604 | 35.3 | 0(*) | 0.0(*) |
| Specialized nursing....... | 3,145 | 100.0 | 861 | 27.4 | 1,606 | 51.1 | 678(*) | 21.5(*) | 0(*) | 0.0(*) |
| Nursing supervisor......... | 35,510 | 100.0 | 11,130 | 31.3 | 16,968 | 47.8 | 7,380 | 20.8 | 31(*) | 0.1(*) |
| Other........... | 1,363 | 100.0 | 335(*) | 24.6(*) | 816(*) | 59.9(*) | 211(*) | 15.5(*) | 0(*) | 0.0(*) |
| Unknown......... | 1,318 | 100.0 | 409(*) | 31.0(*) | 808(*) | 61.3(*) | 101(*) | 7.6(*) | 0(*) | 0.0(*) |

(continued)

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Table D-33. (continued).

| | Total | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Weekly salary** | | | | | | | | | | |
| Less than $300.. | 34,298 | 100.0 | 5,836 | 17.0 | 18,550 | 54.1 | 9,911 | 28.9 | 0(*) | 0.0(*) |
| $300 to $399.99. | 25,679 | 100.0 | 5,056 | 19.7 | 13,849 | 53.9 | 6,775 | 26.4 | 0(*) | 0.0(*) |
| $400 to $499.99. | 17,250 | 100.0 | 3,925 | 22.8 | 8,477 | 49.1 | 4,848 | 28.1 | 0(*) | 0.0(*) |
| $500 and over... | 11,214 | 100.0 | 2,202 | 19.6 | 4,952 | 44.2 | 4,060 | 36.2 | 0(*) | 0.0(*) |
| Unknown...... ... | 11,267 | 100.0 | 2,869 | 25.5 | 4,986 | 44.3 | 3,380 | 30.0 | 31(*) | 0.3(*) |
| **Standard Errors** | | | | | | | | | | |
| Total..... | 3,098 | 0.0 | 1,136 | 1.3 | 2,615 | 2.2 | 2,747 | 2.3 | 31 | 0.0 |
| **Age** | | | | | | | | | | |
| Under 35 years. | 1,224 | 0.0 | 515 | 2.3 | 884 | 3.2 | 864 | 3.2 | 0 | 0.0 |
| 35 to 44....... | 1,264 | 0.0 | 454 | 1.9 | 933 | 3.0 | 956 | 3.0 | 0 | 0.0 |
| 45 to 54....... | 1,492 | 0.0 | 473 | 1.9 | 1,211 | 3.1 | 977 | 3.0 | 31 | 0.1 |
| 55 to 64....... | 1,251 | 0.0 | 409 | 2.0 | 885 | 3.3 | 951 | 3.5 | 0 | 0.0 |
| 65 and over.... | 497 | 0.0 | 124 | 3.9 | 363 | 7.3 | 332 | 7.3 | 0 | 0.0 |
| Unknown........ | 198 | 0.0 | 85 | 9.7 | 170 | 10.6 | 51 | 5.9 | 0 | 0.0 |
| **Highest educational preparation** | | | | | | | | | | |
| Associate degree | 1,205 | 0.0 | 515 | 2.4 | 1,000 | 3.1 | 685 | 2.8 | 0 | 0.0 |
| Diploma......... | 2,255 | 0.0 | 741 | 1.5 | 1,689 | 2.5 | 1,908 | 2.7 | 31 | 0.1 |
| Baccalaureate in nursing.... | 1,022 | 0.0 | 271 | 2.2 | 700 | 4.1 | 787 | 4.4 | 0 | 0.0 |
| Baccalaureate in related area, masters or doctorate..... | 747 | 0.0 | 239 | 3.4 | 462 | 5.3 | 572 | 5.8 | 0 | 0.0 |
| Unknown......... | 153 | 0.0 | 54 | 10.6 | 97 | 14.0 | 106 | 14.5 | 0 | 0.0 |

(continued)

Table D-33. (continued).

| | | | RNs as percentage of nursing staff | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | 0 to 9% | | 10 to 19% | | 20% or more | | No nursing staff | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Position** | | | | | | | | | | |
| General nursing. | 2,539 | 0.0 | 673 | 1.2 | 1,820 | 2.7 | 2,171 | 2.8 | 0 | 0.0 |
| Specialized nursing....... | 399 | 0.0 | 160 | 5.0 | 267 | 6.5 | 261 | 6.9 | 0 | 0.0 |
| Nursing supervisor......... | 1,271 | 0.0 | 673 | 2.0 | 1,080 | 2.4 | 879 | 2.2 | 31 | 0.1 |
| Other........... | 281 | 0.0 | 97 | 7.2 | 246 | 9.5 | 99 | 6.8 | 0 | 0.0 |
| Unknown......... | 308 | 0.0 | 120 | 9.2 | 272 | 10.6 | 88 | 6.4 | 0 | 0.0 |
| **Weekly salary** | | | | | | | | | | |
| Less than $300.. | 1,854 | 0.0 | 529 | 1.7 | 1,424 | 3.1 | 1,369 | 3.2 | 0 | 0.0 |
| $300 to $399.99. | 1,269 | 0.0 | 451 | 1.8 | 1,018 | 2.9 | 859 | 2.8 | 0 | 0.0 |
| $400 to $499.99. | 1,063 | 0.0 | 377 | 2.3 | 744 | 3.5 | 799 | 3.7 | 0 | 0.0 |
| $500 and over... | 1,049 | 0.0 | 264 | 2.7 | 597 | 4.8 | 870 | 5.5 | 0 | 0.0 |
| Unknown......... | 835 | 0.0 | 355 | 3.1 | 591 | 4.0 | 547 | 3.9 | 31 | 0.3 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

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# Appendix E

## Tables Associated With the 1-Year Change in the RN's Employment Status

Table E-1. One year change in employment status of nurses by setting.

| | Total | | | Same employer | | | Different employer | | | Not employed or licensed | | | Unknown | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Estimated | | Number | Estimated | | Number | Estimated | | Number | Estimated | | Number | Estimated | |
| Setting | in sample | Number | Percent | in sample | Number | Percent | in sample | Number | Percent | in sample | Number | Percent | in sample | Number | Percent |
| Total.... | 25,294 | 1,485,725 | 100.0 | 19,846 | 1,170,608 | 78.8 | 2,899 | 165,490 | 11.1 | 1,843 | 106,725 | 7.2 | 706 | 42,902 | 2.9 |
| Nursing homes. | 1,985 | 115,077 | 100.0 | 1,419 | 83,713 | 72.7 | 271 | 15,433 | 13.4 | 230 | 12,437 | 10.8 | 65 | 3,494 | 3.0 |
| Hospitals..... | 17,101 | 1,011,965 | 100.0 | 13,877 | 824,939 | 81.5 | 1,609 | 90,160 | 8.9 | 1,180 | 69,593 | 6.9 | 435 | 27,263 | 2.7 |
| Other settings | 6,204 | 358,486 | 100.0 | 4,547 | 261,764 | 73.0 | 1,019 | 59,897 | 16.7 | 433 | 24,695 | 6.9 | 205 | 12,131 | 3.4 |
| Unknown....... | 4 | 207(*) | 100.0(*) | 3 | 192(*) | 92.8(*) | 0 | 0(*) | 0(*) | 0 | 0(*) | 0.0(*) | 1 | 15(*) | 7.2(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNS employed as RNs in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table E-2. One-year change in employment status by nurses in nursing homes by age.

| Age | Total |  |  | Same employer |  |  | Different employer |  |  | Not employed or licensed |  |  | Unknown |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Number in sample | Estimated |  | Number in sample | Estimated |  | Number in sample | Estimated |  | Number in sample | Estimated |  | Number in sample | Estimated |  |
|  |  | Number | Percent |  | Number | Percent |  | Number | Percent |  | Number | Percent |  | Number | Percent |
| Total..... | 1,985 | 115,077 | 100.0 | 1,419 | 83,713 | 72.7 | 271 | 15,433 | 13.4 | 230 | 12,437 | 10.8 | 65 | 3,494 | 3.0 |
| Under 35....... | 441 | 25,165 | 100.0 | 224 | 12,881 | 51.2 | 98 | 5,423 | 21.5 | 111 | 6,228 | 24.7 | 8 | 636(*) | 2.5(*) |
| 35 to 44....... | 487 | 28,698 | 100.0 | 348 | 21,422 | 74.6 | 76 | 4,274 | 14.9 | 50 | 2,333 | 8.1 | 13 | 667(*) | 2.3(*) |
| 45 to 54....... | 524 | 30,599 | 100.0 | 424 | 24,834 | 81.2 | 46 | 2,598 | 8.5 | 36 | 2,203 | 7.2 | 18 | 963(*) | 3.1(*) |
| 55 to 64....... | 397 | 22,949 | 100.0 | 321 | 18,522 | 80.7 | 39 | 2,600 | 11.3 | 24 | 1,134(*) | 4.9(*) | 13 | 693(*) | 3.0(*) |
| 65 and over.... | 92 | 5,388 | 100.0 | 77 | 4,748 | 88.1 | 7 | 248(*) | 4.6(*) | 5 | 315(*) | 5.8(*) | 3 | 77(*) | 1.4(*) |
| Unknown........ | 44 | 2,280 | 100.0 | 25 | 1,307 | 57.3 | 5 | 289(*) | 12.7(*) | 4 | 226(*) | 9.9(*) | 10 | 458(*) | 20.1(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNS employed in nursing homes in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services)

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table E-3. One-year change in employment status by nurses in nursing homes by the number of years since graduation from basic nursing education program.

| Years since graduation | Total |  |  | Same employer |  |  | Different employer |  |  | Not employed or licensed |  |  | Unknown |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent |
| Total..... | 1,985 | 115,077 | 100.0 | 1,419 | 83,713 | 72.7 | 271 | 15,433 | 13.4 | 230 | 12,437 | 10.8 | 65 | 3,494 | 3.0 |
| Under 5......... | 221 | 12,246 | 100.0 | 65 | 4,171 | 34.1 | 60 | 2,866 | 23.4 | 91 | 4,917 | 40.1 | 5 | 293(*) | 2.4(*) |
| 5 to 9.......... | 245 | 14,369 | 100.0 | 157 | 9,416 | 65.5 | 55 | 3,220 | 22.4 | 25 | 1,247 | 8.7 | 8 | 487(*) | 3.4(*) |
| 10 to 14....... | 215 | 12,653 | 100.0 | 160 | 9,426 | 74.5 | 25 | 1,528 | 12.1 | 25 | 1,447 | 11.4 | 5 | 252(*) | 2.0(*) |
| 15 or more..... | 1,290 | 75,032 | 100.0 | 1,030 | 60,391 | 80.5 | 129 | 7,663 | 10.2 | 87 | 4,700 | 6.3 | 44 | 2,278 | 3.0 |
| Unknown........ | 14 | 776(*) | 100.0(*) | 7 | 308(*) | 39.7(*) | 2 | 157(*) | 20.2(*) | 2 | 126(*) | 16.2(*) | 3 | 185(*) | 23.8(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNS employed in nursing homes in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services)

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table E-4. One-year change in employment status by full-time nurses in nursing homes by average weekly salary.

| Average weekly salary | Total | | | Same employer | | | Different employer | | | Not employed or licensed | | | Unknown | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number in sample | Estimated | | Number in sample | Estimated | | Number in sample | Estimated | | Number in sample | Estimated | | Number in sample | Estimated | |
| | | Number | Percent | | Number | Percent | | Number | Percent | | Number | Percent | | Number | Percent |
| Total..... | 1,149 | 68,102 | 100.0 | 830 | 49,836 | 73.2 | 178 | 10,428 | 15.3 | 105 | 5,702 | 8.4 | 36 | 2,136 | 3.1 |
| Under $300..... | 189 | 10,808 | 100.0 | 115 | 6,840 | 63.3 | 36 | 2,115 | 19.6 | 33 | 1,713 | 15.8 | 5 | 140(*) | 1.3(*) |
| $300 to $399... | 465 | 26,444 | 100.0 | 320 | 18,836 | 71.2 | 80 | 4,133 | 15.6 | 55 | 2,881 | 10.9 | 10 | 593(*) | 2.2(*) |
| $400 to $499... | 278 | 16,763 | 100.0 | 222 | 13,008 | 77.6 | 40 | 2,706 | 16.1 | 11 | 637(*) | 3.8(*) | 5 | 413(*) | 2.5(*) |
| $500 and over.. | 143 | 9,192 | 100.0 | 124 | 7,808 | 84.9 | 11 | 815(*) | 8.9(*) | 2 | 75(*) | .8(*) | 6 | 494(*) | 5.4(*) |
| Unknown........ | 74 | 4,896 | 100.0 | 49 | 3,346 | 68.3 | 11 | 658(*) | 13.4(*) | 4 | 396(*) | 8.1(*) | 10 | 496(*) | 10.1(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNs employed full-time in nursing homes in the U.S. in 1984.

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table E-5. Full-time nurses who were retained for at least one year by setting and salary.

| Average weekly salary | Nursing homes |  |  | Hospitals |  |  | Other settings |  |  |
|---|---|---|---|---|---|---|---|---|---|
|  | Number in sample | Estimated |  | Number in sample | Estimated |  | Number in sample | Estimated |  |
|  |  | Number | Percent |  | Number | Percent |  | Number | Percent |
| Total..... | 830 | 49,838 | 73.2 | 9,398 | 561,013 | 81.3 | 3,013 | 171,940 | 75.9 |
| Under $300..... | 115 | 6,840 | 63.3 | 242 | 12,108 | 60.2 | 439 | 23,165 | 72.1 |
| $300 to $399... | 320 | 18,836 | 71.2 | 2,115 | 112,215 | 71.0 | 863 | 46,721 | 70.2 |
| $400 to $499... | 222 | 13,008 | 77.6 | 3,779 | 230,590 | 83.6 | 851 | 49,387 | 77.4 |
| $500 and over.. | 124 | 7,808 | 84.9 | 2,870 | 182,972 | 89.3 | 719 | 44,462 | 84.1 |
| Unknown........ | 49 | 3,346 | 68.3 | 392 | 23,127 | 75.0 | 141 | 8,206 | 74.0 |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNs employed as RNs in the U.S. in 1984 who had the same employer one year earlier.

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table E-6. One-year change in employment status by nurses in nursing homes by highest educational preparation.

| Highest preparation | Total | | | Same employer | | | Different employer | | | Not employed or licensed | | | Unknown | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent |
| Total..... | 1,985 | 115,077 | 100.0 | 1,419 | 83,713 | 72.7 | 271 | 15,433 | 13.4 | 230 | 12,437 | 10.8 | 65 | 3,494 | 3.0 |
| Diploma......... | 1,181 | 68,493 | 100.0 | 917 | 53,409 | 78.0 | 130 | 3,810 | 11.4 | 90 | 4,943 | 7.2 | 44 | 2,331 | 3.4 |
| Associate degree | 434 | 24,901 | 100.0 | 250 | 14,868 | 59.7 | 87 | 4,712 | 18.9 | 85 | 4,636 | 18.6 | 12 | 686(•) | 2.8(•) |
| Baccalaureate.. | 264 | 14,500 | 100.0 | 175 | 10,032 | 69.2 | 37 | 1,901 | 13.1 | 44 | 2,201 | 15.2 | 8 | 365(•) | 2.5(•) |
| Other(#)....... | 84 | 6,034 | 100.0 | 60 | 4,534 | 75.1 | 15 | 959(•) | 15.9(•) | 8 | 430(•) | 7.1(•) | 1 | 112(•) | 1.9(•) |
| Unknown........ | 22 | 1,149(•) | 100.0(•) | 17 | 870(•) | 75.7(•) | 2 | 52(•) | 4.5(•) | 3 | 227(•) | 19.8(•) | 0 | 0(•) | 0.0(•) |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNS employed in nursing homes in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services)

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

# Includes RNs with advanced degrees in nursing or nursing related field and those with baccalaureate degrees in a nursing related field.

Table E-7. One-year change in employment status by nurses in nursing homes by position title.

| Position title | Total |  |  | Same employer |  |  | Different employer |  |  | Not employed or licensed |  |  | Unknown |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent | Number in sample | Estimated Number | Estimated Percent |
| Total..... | 1,985 | 115,077 | 100.0 | 1,419 | 83,713 | 72.7 | 271 | 15,433 | 13.4 | 230 | 12,437 | 10.8 | 65 | 3,494 | 3.0 |
| Staff, general duty, or specialist nurse...... | 1,050 | 59,226 | 100.0 | 700 | 39,531 | 66.7 | 153 | 8,908 | 15.0 | 164 | 9,045 | 15.3 | 33 | 1,741 | 2.9 |
| Administrative, supervisory, or head nurse..... | 799 | 47,668 | 100.0 | 619 | 38,056 | 79.8 | 100 | 5,483 | 11.5 | 53 | 2,675 | 5.6 | 27 | 1,452 | 3.0 |
| Other.......... | 136 | 8,186 | 100.0 | 100 | 6,126 | 74.8 | 18 | 1,042(*) | 12.7(*) | 13 | 717(*) | 8.8(*) | 5 | 300(*) | 3.7(*) |

SOURCE: 1984 National Sample Survey of Registered Nurses

POPULATION: RNS employed in nursing homes in the U.S. in 1984 (includes nurses employed through contracts and temporary employment services)

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

# Appendix F

## Representative Standard Errors for Estimates Based on Data From the National Sample Survey of Registered Nurses

## Table F-1. Standard errors for 1 year change in employment status by age for nurses employed in nursing homes

| | | One-year change in employment status | | | | |
|---|---|---|---|---|---|---|
| RN Age | | Total | Same employer | Different employer | Not employed or licensed | Unknown |
| Total | Weighted | 115,077 | 83,713 | 15,433 | 12,437 | 3,494 |
| | SE Wt. | 2,791 | 2,815 | 1,155 | 783 | 416 |
| | Row % | 100.0 | 72.7 | 13.4 | 10.8 | 3.0 |
| | SE Row | 0.0 | 1.4 | 1.0 | 0.7 | 0.4 |
| | Col. % | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | SE Col. | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Under 35 | Weighted | 25,165 | 12,881 | 5,423 | 6,226 | 636 |
| | SE Wt. | 1,147 | 894 | 493 | 575 | 166 |
| | Row % | 100.0 | 51.2 | 21.5 | 24.7 | 2.5 |
| | SE Row | 0.0 | 2.7 | 1.5 | 1.9 | 0.6 |
| | Col. % | 21.9 | 15.4 | 35.1 | 50.1 | 18.2 |
| | SE Col. | 1.1 | 1.1 | 2.2 | 3.1 | 5.2 |
| 35 to 44 | Weighted | 28,696 | 21,422 | 4,274 | 2,333 | 667 |
| | SE Wt. | 1,364 | 1,492 | 556 | 328 | 136 |
| | Row % | 100.0 | 74.6 | 14.9 | 8.1 | 2.3 |
| | SE Row | 0.0 | 2.4 | 2.1 | 1.2 | 0.5 |
| | Col. % | 24.9 | 25.6 | 27.7 | 18.8 | 19.1 |
| | SE Col. | 1.2 | 1.7 | 3.3 | 2.5 | 4.6 |
| 45 to 54 | Weighted | 30,599 | 24,834 | 2,598 | 2,203 | 963 |
| | SE Wt. | 1,585 | 1,674 | 422 | 455 | 276 |
| | Row % | 100.0 | 81.2 | 8.5 | 7.2 | 3.1 |
| | SE Row | 0.0 | 2.4 | 1.4 | 1.5 | 0.9 |
| | Col. % | 26.6 | 29.7 | 16.8 | 17.7 | 27.6 |
| | SE Col. | 1.1 | 1.5 | 2.7 | 3.3 | 5.7 |
| 55 to 64 | Weighted | 11,949 | 18,522 | 2,600 | 1,134 | 693 |
| | SE Wt. | 1,496 | 1,273 | 559 | 294 | 176 |
| | Row % | 100.0 | 80.7 | 11.3 | 4.9 | 3.0 |
| | SE Row | 0.0 | 2.3 | 2.3 | 1.2 | 0.8 |
| | Col. % | 19.9 | 22.1 | 16.8 | 9.1 | 19.8 |
| | SE Col. | 1.0 | 1.1 | 2.8 | 2.5 | 4.1 |
| 65 and over | Weighted | 5,388 | 4,748 | 248 | 315 | 77 |
| | SE Wt. | 713 | 641 | 105 | 146 | 50 |
| | Row % | 100.0 | 88.1 | 4.6 | 5.8 | 1.4 |
| | SE Row | 0.0 | 3.0 | 1.9 | 2.4 | 0.9 |
| | Col. % | 4.7 | 5.7 | 1.6 | 2.5 | 2.2 |
| | SE Col. | 0.6 | 0.7 | 0.7 | 1.1 | 1.4 |

## Table F-1. Standard errors for 1 year change in employment status by age for nurses employed in nursing homes

| | | One-year change in employment status | | | | |
|---|---|---|---|---|---|---|
| | | Total | Same employer | Different employer | Not Emplcyed or licensed | Unknown |
| RN age unknown | Weighted | 2,280 | 1,307 | 289 | 226 | 458 |
| | SE Wt. | 360 | 289 | 222 | 122 | 174 |
| | Row % | 100.0 | 57.3 | 12.7 | 9.9 | 20.1 |
| | SE Row | 0.0 | 9.0 | 8.9 | 5.7 | 6.7 |
| | Col. % | 2.0 | 1.6 | 1.9 | 1.8 | 13.1 |
| | SE Col. | 0.3 | 0.4 | 1.4 | 1.0 | 4.7 |

# Appendix G

## Number of Years RNs Worked in Same Facility

Table G-1. Number of years RN has worked in the facility by age.

| Age | Total |  | Less than 1 year |  | 1 to < 2 years |  | 2 to < 5 years |  | 5 or more years |  | Unknown |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 20,727 | 20.8 | 14,948 | 15.0 | 21,993 | 22.1 | 40,642 | 40.8 | 1,399 | 1.4 |
| Under 35....... | 21,769 | 100.0 | 8,164 | 37.5 | 4,861 | 22.3 | 4,321 | 19.8 | 4,111 | 18.9 | 312(•) | 1.4(•) |
| 35 to 44....... | 25,253 | 100.0 | 5,421 | 21.5 | 4,047 | 16.0 | 5,838 | 23.1 | 9,517 | 37.7 | 431(•) | 1.7(•) |
| 45 to 54....... | 27,116 | 100.0 | 4,592 | 16.9 | 2,743 | 10.1 | 6,536 | 24.1 | 12,858 | 47.4 | 387(•) | 1 4(•) |
| 55 to 64....... | 21,193 | 100.0 | 2,185 | 10.3 | 2,875 | 13.6 | 4,649 | 21.9 | 11,316 | 53.4 | 168(•) | 0.8(•) |
| 65 and over... | 3,536 | 100.0 | 216(•) | 6.1(•) | 342(•) | 9.7(•) | 427(•) | 12.1(•) | 2,449 | 69.3 | 101(•) | 2.9(•) |
| Unknown........ | 841 | 100.0 | 147(•) | 17.5(•) | 79(•) | 9.4(•) | 224(•) | 26.7(•) | 391(•) | 46.5(•) | 0(•) | 0(•) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 1,307 | 1.1 | 989 | 0.9 | 1,272 | 1.1 | 1,881 | 1.4 | 310 | 0.3 |
| Under 35....... | 1,224 | 0.0 | 747 | 2.6 | 518 | 2.1 | 517 | 2.1 | 529 | 2.1 | 126 | 0.6 |
| 35 to 44....... | 1,264 | 0.0 | 527 | 1.8 | 435 | 1.6 | 577 | 1.9 | 793 | 2.4 | 230 | 0.9 |
| 45 to 34....... | 1,492 | 0.0 | 887 | 2.8 | 347 | 1.3 | 687 | 2.2 | 934 | 2.7 | 149 | 0.5 |
| 55 to 64....... | 1,261 | 0.0 | 331 | 1.5 | 589 | 2.5 | 542 | 2.3 | 864 | 2.8 | 68 | 0.3 |
| 65 and over... | 497 | 0.0 | 93 | 2.6 | 218 | 5.7 | 164 | 4.4 | 405 | 6.8 | 66 | 1.9 |
| Unknown........ | 196 | 0.0 | 72 | 8.0 | 41 | 4.7 | 103 | 10.3 | 140 | 11.8 | 0 | 0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table G-2. Number of years RN has worked in facility by highest educational preparation.

| Highest preparation | Total |  | Less than 1 year |  | 1 to < 2 years |  | 2 to < 5 years |  | 5 or more years |  | Unknown |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total... | 99,707 | 100.0 | 20,727 | 20.8 | 14,946 | 15.0 | 21,993 | 22.1 | 40,642 | 40.8 | 1,399 | 1.4 |
| Associate degree | 21,843 | 100.0 | 6,996 | 32.0 | 5,182 | 23.7 | 4,102 | 18.8 | 5,454 | 25.0 | 109(•) | 0.5(•) |
| Diploma........ | 56,814 | 100.0 | 7,597 | 13.4 | 6,230 | 11.0 | 13,055 | 23.0 | 29,238 | 51.5 | 694 | 1.2 |
| Bachelors in nursing....... | 13,281 | 100.0 | 4,202 | 31.6 | 2,170 | 16.3 | 2,974 | 22.4 | 3,649 | 27.5 | 286(•) | 2.2(•) |
| Other (@)...... | 7,227 | 100.0 | 1,779 | 24.6 | 1,291 | 17.9 | 1,733 | 24.0 | 2,114 | 29.3 | 310(•) | 4.3(•) |
| Unknown........ | 541(•) | 100.0(•) | 152(•) | 28.0(•) | 73(•) | 13.5(•) | 129(•) | 23.8(•) | 188(•) | 34.7(•) | 0(•) | 0.0(•) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total... | 3,098 | 0.0 | 1,307 | 1.1 | 989 | 0.9 | 1,272 | 1.1 | 1,881 | 1.4 | 310 | 0.3 |
| Associate degree | 1,205 | 0.0 | 593 | 2.3 | 642 | 2.4 | 458 | 1.9 | 606 | 2.3 | 52 | 0.2 |
| Diploma........ | 2,255 | 0.0 | 777 | 1.3 | 586 | 1.0 | 955 | 1.5 | 1,604 | 1.7 | 158 | 0.3 |
| Bachelors in nursing....... | 1,022 | 0.0 | 639 | 3.9 | 343 | 2.4 | 420 | 2.9 | 523 | 3.3 | 150 | 1.1 |
| Other.......... |  | 0.0 |  |  |  |  |  |  |  |  |  |  |
| Unknown........ | 153 | 0.0 | 72 | 11.9 | 59 | 10.1 | 85 | 13.3 | 87 | 13.2 | 0 | 0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTES: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

@Includes RNs with advanced degrees in nursing or a nursing related field or a bachelors in a nursing related field.

Table G-3. Number of years RN has worked in facility by number of different types of continuing education courses taken by the nurse.

| Number of different types of C.E. courses taken | Total | | Less than 1 year | | 1 to < 2 years | | 2 to < 5 years | | 5 or more years | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total... | 99,707 | 100.0 | 20,727 | 20.8 | 14,946 | 15.0 | 21,993 | 22.1 | 40,642 | 40.8 | 1,399 | 1.4 |
| None.......... | 20,068 | 100.0 | 5,454 | 27.2 | 2,776 | 13.8 | 4,633 | 23.1 | 6,918 | 34.5 | 287(*) | 1.4(*) |
| 1............. | 16,873 | 100.0 | 4,474 | 26.5 | 2,337 | 13.8 | 3,156 | 18.7 | 6,837 | 40.5 | 70(*) | 0.4(*) |
| 2 or 3....... | 27,996 | 100.0 | 5,894 | 21.1 | 5,285 | 18.9 | 6,180 | 22.1 | 10,089 | 36.0 | 547(*) | 2.0(*) |
| 4 or 5....... | 17,586 | 100.0 | 2,987 | 17.0 | 2,448 | 13.9 | 4,140 | 23.5 | 7,804 | 44.4 | 206(*) | 1.2(*) |
| 6 or more.... | 17,185 | 100.0 | 1,916 | 11.2 | 2,101 | 12.2 | 3,886 | 22.6 | 8,994 | 52.3 | 288(*) | 1.7(*) |
| **Standard errors** | | | | | | | | | | | | |
| Total... | 3,098 | 0.0 | 1,307 | 1.1 | 989 | 0.9 | 1,272 | 1.1 | 1,881 | 1.4 | 310 | 0.3 |
| None.......... | 1,291 | 0.0 | 646 | 2.8 | 410 | 1.9 | 571 | 2.3 | 731 | 2.8 | 127 | 0.6 |
| 1............. | 1,062 | 0.0 | 565 | 2.9 | 343 | 1.9 | 493 | 2.6 | 687 | 3.1 | 37 | 0.2 |
| 2 or 3....... | 1,407 | 0.0 | 637 | 2.0 | 542 | 1.8 | 778 | 2.4 | 786 | 2.3 | 238 | 0.8 |
| 4 or 5....... | 1,104 | 0.0 | 374 | 2.0 | 515 | 2.7 | 479 | 2.5 | 778 | 3.2 | 96 | 0.5 |
| 6 or more.... | 1,181 | 0.0 | 299 | 1.7 | 365 | 2.0 | 461 | 2.3 | 906 | 3.1 | 122 | 0.7 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table G-4. Number of years RN worked in facility by weekly salary of nurses working full-time.

| Weekly salary | Total | | Less than 1 year | | 1 to < 2 years | | 2 to < 5 years | | 5 or more years | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total..... | 60,624 | 100.0 | 13,130 | 21.7 | 8,863 | 14.6 | 12,990 | 21.4 | 25,422 | 41.9 | 219(*) | 0.4(*) |
| Less than $300 | 5,740 | 100.0 | 1,759 | 30.6 | 1,262 | 22.0 | 1,208 | 21.0 | 1,511 | 26.3 | 0(*) | 0.0(*) |
| $300 to $399.. | 21,726 | 100.0 | 6,019 | 27.7 | 3,526 | 16.2 | 4,526 | 20.8 | 7,553 | 34.8 | 101(*) | 0.5(*) |
| $400 to $499.. | 16,272 | 100.0 | 2,836 | 17.4 | 1,854 | 11.4 | 3,716 | 22.8 | 7,867 | 48.3 | 0(*) | 0.0(*) |
| $500 and over. | 10,287 | 100.0 | 1,511 | 14.7 | 1,324 | 12.9 | 2,317 | 22.5 | 5,097 | 49.6 | 38(*) | 0.4(*) |
| Unknown....... | 6,600 | 100.0 | 1,006 | 15.2 | 897 | 13.6 | 1,275 | 18.6 | 3,393 | 51.4 | 80(*) | 1.2(*) |
| **Standard errors** | | | | | | | | | | | | |
| Total..... | 2,328 | 0.0 | 1,110 | 1.5 | 755 | 1.1 | 996 | 1.4 | 1,325 | 1.9 | 83 | 0.1 |
| Less than $300 | | 0.0 | | | | | | | | | | |
| $300 to $399.. | 1,198 | 0.0 | 665 | 2.5 | 423 | 1.8 | 494 | 2.1 | 704 | 2.6 | 50 | 0.2 |
| $400 to $499.. | 1,046 | 0.0 | 396 | 2.3 | 316 | 1.8 | 499 | 2.6 | 712 | 3.1 | 0 | 0.0 |
| $500 and over. | 984 | 0.0 | 316 | 2.9 | 269 | 5.0 | 634 | 5.0 | 617 | 4.9 | 38 | 0.4 |
| Unknown....... | 612 | 0.0 | 209 | 3.1 | 199 | 2.9 | 240 | 3.4 | 488 | 4.6 | 55 | 0.8 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's payroll and were considered full-time employees.

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table G-5. Number of years RN has worked in a facility by whether a nurse has other employment.

| Nurse has other employment | Total |  | Less than 1 year |  | 1 to < 2 years |  | 2 to < 5 years |  | 5 or more years |  | Unknown |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 20,727 | 20.8 | 14,946 | 15.0 | 21,993 | 22.1 | 40,642 | 40.8 | 1,399 | 1.4 |
| Yes........... | 11,900 | 100.0 | 3,623 | 30.4 | 2,697 | 22.7 | 2,666 | 22.4 | 2,864 | 24.1 | 50(*) | 0.4(*) |
| No............ | 86,508 | 100.0 | 16,986 | 19.6 | 12,212 | 14.1 | 19,314 | 22.3 | 37,694 | 43.6 | 302(*) | 0.3(*) |
| Unknown....... | 1,299 | 100.0 | 118(*) | 9.0(*) | 37(*) | 2.9(*) | 13(*) | 1.0(*) | 85(*) | 6.5(*) | 1,046(*) | 80.5(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 1,307 | 1.1 | 989 | 0.9 | 1,272 | 1.1 | 1,881 | 1.4 | 310 | 0.3 |
| Yes........... | 888 | 0.0 | 481 | 3.3 | 447 | 3.2 | 364 | 2.8 | 418 | 3.0 | 40 | 0.3 |
| No............ | 2,933 | 0.0 | 1,227 | 1.2 | 892 | 0.9 | 1,205 | 1.2 | 1,836 | 1.5 | 132 | 0.2 |
| Unknown....... | 295 | 0.0 | 69 | 5.2 | 37 | 2.9 | 13 | 1.0 | 40 | 3.2 | 281 | 6.9 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nures employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table G-6. Number of years RN has worked in a facility by shift.

| Shift | Total | | Less than 1 year | | 1 to < 2 years | | 2 to < 5 years | | 5 or more years | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 20,727 | 20.8 | 14,946 | 15.0 | 21,993 | 22.1 | 40,642 | 40.8 | 1,399 | 1.4 |
| Shift rotates. | 8,926 | 100.0 | 2,335 | 26.2 | 1,789 | 20.0 | 2,068 | 23.2 | 2,719 | 30.5 | 14(*) | 0.2(*) |
| Day shift..... | 53,447 | 100.0 | 10,449 | 19.5 | 7,335 | 13.7 | 12,147 | 22.7 | 23,304 | 43.6 | 212(*) | 0.4(*) |
| Evening shift. | 16,889 | 100.0 | 3,680 | 21.8 | 3,034 | 18.0 | 3,928 | 23.3 | 6,181 | 36.6 | 65(*) | 0.4(*) |
| Night shift... | 15,280 | 100.0 | 3,544 | 23.2 | 2,288 | 15.0 | 2,899 | 19.0 | 6,538 | 42.8 | 12(*) | 0.1(*) |
| Unknown....... | 5,165 | 100.0 | 718 | 13.9 | 500(*) | 9.7(*) | 950 | 18.4 | 1,902 | 36.8 | 1,096 | 21.2 |
| **Standard errors** | | | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,307 | 1.1 | 989 | 0.9 | 1,272 | 1.1 | 1,881 | 1.4 | 310 | 0.3 |
| Shift rotates. | 805 | 0.0 | 363 | 3.6 | 337 | 3.4 | 342 | 3.1 | 440 | 3.8 | 14 | 0.2 |
| Day shift..... | 1,765 | 0.0 | 835 | 1.4 | 598 | 1.1 | 882 | 1.5 | 1,220 | 1.7 | 122 | 0.2 |
| Evening shift. | 1,133 | 0.0 | 435 | 2.3 | 559 | 2.9 | 498 | 2.6 | 717 | 3.3 | 47 | 0.3 |
| Night shift... | 1,049 | 0.0 | 587 | 3.3 | 384 | 2.3 | 445 | 2.7 | 674 | 3.5 | 12 | 0.1 |
| Unknown....... | 535 | 0.0 | 211 | 3.8 | 168 | 3.1 | 215 | 3.9 | 314 | 5.0 | 284 | 4.8 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table G-7. Number of years RN worked in a facility by ownership.

| Ownership | Total | | Less than 1 year | | 1 to < 2 years | | 2 to < 5 years | | 5 or more years | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 20,727 | 20.8 | 14,946 | 15.0 | 21,993 | 22.1 | 40,842 | 40.8 | 1,399 | 1.4 |
| Proprietary.. | 57,033 | 100.0 | 12,370 | 21.7 | 9,886 | 17.3 | 12,656 | 22.2 | 21,386 | 37.5 | 735(*) | 1.3(*) |
| Non-profit... | 30,924 | 100.0 | 6,895 | 22.3 | 3,806 | 12.3 | 6,095 | 19.7 | 13,477 | 43.6 | 651(*) | 2.1(*) |
| Government... | 11,751 | 100.0 | 1,462 | 12.4 | 1,254 | 10.7 | 3,242 | 27.6 | 5,780 | 49.2 | 13(*) | 0.1(*) |
| **Standard errors** | | | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,307 | 1.1 | 989 | 0.9 | 1,272 | 1.1 | 1,881 | 1.4 | 310 | 0.3 |
| Proprietary.. | 2,351 | 0.0 | 804 | 1.3 | 784 | 1.2 | 942 | 1.3 | 1,376 | 1.7 | 175 | 0.3 |
| Nonprofit.... | 2,631 | 0.0 | 1,074 | 2.6 | 640 | 1.6 | 670 | 1.9 | 1,341 | 2.9 | 259 | 0.8 |
| Government... | 1,560 | 0.0 | 311 | 2.4 | 287 | 2.1 | 736 | 4.4 | 901 | 4.2 | 13 | 0.1 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table G-8. Number of years RN worked in a facility by chain states.

| Chain Status | Total | | Less than 1 year | | 1 to < 2 years | | 2 to < 5 years | | 5 or more years | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total.... | 87,958 | 100.0 | 19,265 | 21.9 | 13,692 | 15.6 | 18,751 | 21.3 | 34,862 | 39.6 | 1,388 | 1.6 |
| Independent... | 43,520 | 100.0 | 9,214 | 21.2 | 5,240 | 12.0 | 9,258 | 21.3 | 19,046 | 43.8 | 762(*) | 1.8(*) |
| 2 to 9 facilities......... | 18,707 | 100.0 | 3,229 | 17.3 | 3,299 | 17.6 | 4,593 | 24.6 | 7,391 | 39.5 | 195(*) | 1.0(*) |
| 10 to 99 facilities... | 11,164 | 100.0 | 3,056 | 27.4 | 2,458 | 22.0 | 2,081 | 18.6 | 3,442 | 30.8 | 125(*) | 1.1(*) |
| 100 or more facilities... | 12,890 | 100.0 | 3,182 | 24.7 | 2,521 | 19.6 | 2,563 | 19.9 | 4,332 | 33.6 | 293(*) | 2.3(*) |
| Unknown....... | 1,675 | 100.0 | 580(*) | 34.6(*) | 176(*) | 10.5(*) | 256(*) | 15.3(*) | 651(*) | 38.9(*) | 11(*) | 0.7(*) |
| **Standard errors** | | | | | | | | | | | | |
| Total.... | 2,997 | 0.0 | 1,288 | 1.2 | 981 | .9 | 1,090 | 1.1 | 1,757 | 1.5 | 310 | 0.3 |
| Independent... | 2,739 | 0.0 | 1,109 | 2.0 | 874 | 1.2 | 873 | 1.7 | 1,454 | 2.3 | 274 | 0.6 |
| Small......... | 1,791 | 0.0 | 516 | 2.3 | 503 | 2.0 | 608 | 2.2 | 947 | 3.3 | 80 | 0.4 |
| Medium........ | 1,322 | 0.0 | 440 | 2.8 | 404 | 2.7 | 368 | 2.5 | 647 | 3.8 | 67 | 0.6 |
| Large......... | 1,228 | 0.0 | 418 | 2.5 | 437 | 2.8 | 389 | 2.4 | 607 | 3.2 | 103 | 0.8 |
| Unknown....... | 462 | 0.0 | 191 | 5.6 | 71 | 4.2 | 102 | 4.9 | 237 | 7.0 | 11 | 0.7 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: Nurses employed in proprietary and nonprofit nursing homes.

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25

Table G-9. Number of years RN worked in a facility by the number of resident beds that are available.

| Available beds | Total | | Less than 1 year | | 1 to < 2 years | | 2 to < 5 years | | 5 or more years | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 20,727 | 20.8 | 14,946 | 15.0 | 21,993 | 22.1 | 40,642 | 40.8 | 1,399 | 1.4 |
| 50 or less.... | 8,587 | 100.0 | 1,285(*) | 15.0(*) | 1,077(*) | 12.5(*) | 2,215 | 25.8 | 3,995 | 46.5 | 14(*) | 0.2(*) |
| 51 to 99...... | 25,133 | 100.0 | 5,445 | 21.7 | 3,676 | 14.6 | 5,427 | 21.6 | 10,011 | 39.8 | 573(*) | 2.3(*) |
| 100 to 149.... | 24,972 | 100.0 | 4,733 | 19.0 | 4,194 | 16.8 | 5,805 | 23.2 | 9,944 | 39.8 | 298(*) | 1.2(*) |
| 150 to 199.... | 16,248 | 100.0 | 4,427 | 27.2 | 2,740 | 16.9 | 3,244 | 20.0 | 5,577 | 34.3 | 260(*) | 1.6(*) |
| 200 and over.. | 24,767 | 100.0 | 4,837 | 19.5 | 3,259 | 13.2 | 5,302 | 21.4 | 11,116 | 44.9 | 254(*) | 1.0(*) |
| **Standard errors** | | | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,307 | 1.1 | 989 | 0.9 | 1,272 | 1.1 | 1,881 | 1.4 | 310 | 0.3 |
| 50 or less.... | 1,161 | 0.0 | 1,285 | 3.6 | 310 | 3.3 | 493 | 5.1 | 791 | 5.6 | 14 | 0.2 |
| 51 to 99...... | 1,897 | 0.0 | 894 | 2.8 | 583 | 1.8 | 614 | 2.3 | 986 | 3.1 | 243 | 0.9 |
| 100 to 149.... | 1,621 | 0.0 | 449 | 1.7 | 492 | 1.8 | 773 | 2.4 | 945 | 2.5 | 104 | 0.4 |
| 150 to 199.... | 1,492 | 0.0 | 623 | 2.6 | 431 | 2.1 | 454 | 2.1 | 712 | 3.4 | 88 | 0.5 |
| 200 and over.. | 1,618 | 0.0 | 569 | 2.1 | 430 | 1.6 | 589 | 1.9 | 998 | 2.4 | 136 | 0.5 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nures employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table G-10. Number of years RN worked in a facility by the number of hosital beds in the county.

| Hospital beds in county | Total |  | Less than 1 year |  | 1 to < 2 years |  | 2 to < 5 years |  | 5 or more years |  | Unknown |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 20,727 | 20.8 | 14,946 | 15.0 | 21,993 | 22.1 | 40,642 | 40.8 | 1,399 | 1.4 |
| 0............ | 15,641 | 100.0 | 3,243 | 20.7 | 2.299 | 14.7 | 3,406 | 21.8 | 6,340 | 40.5 | 353(*) | 2.3(*) |
| 1 to 99....... | 36,397 | 100.0 | 7,275 | 20.0 | 5,408 | 14.9 | 8,363 | 23.0 | 14,939 | 41.0 | 412(*) | 1.1(*) |
| 100 to 199.... | 17,383 | 100.0 | 3,997 | 23.0 | 2,516 | 14.5 | 3,909 | 22.5 | 6,496 | 37.4 | 466(*) | 2.7(*) |
| 200 to 299.... | 7,449 | 100.0 | 1,516 | 20.4 | 1,200 | 16.1 | 1,703 | 22.9 | 3,017 | 40.5 | 12(*) | 0.2(*) |
| 300 and over.. | 22,837 | 100.0 | 4,696 | 20.6 | 3,522 | 15.4 | 4,612 | 20.2 | 9,850 | 43.1 | 156(*) | 0.7(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 1,307 | 1.1 | 989 | 0.9 | 1,272 | 1.1 | 1,881 | 1.4 | 310 | 0.3 |
| 0............ | 1,022 | 0.0 | 435 | 2.4 | 343 | 1.9 | 412 | 2.3 | 613 | 2.8 | 127 | 0.8 |
| 1 to 99....... | 1,691 | 0.0 | 643 | 1.6 | 528 | 1.3 | 778 | 1.8 | 1,100 | 2.1 | 136 | 0.4 |
| 100 to 199.... | 1,288 | 0.0 | 580 | 2.6 | 510 | 2.4 | 500 | 2.7 | 651 | 3.3 | 243 | 1.4 |
| 200 to 299.... | 723 | 0.0 | 446 | 5.0 | 224 | 2.9 | 324 | 3.8 | 397 | 4.5 | 12 | 0.2 |
| 300 and over.. | 1,436 | 0.0 | 564 | 2.2 | 489 | 1.8 | 645 | 2.1 | 892 | 2.7 | 74 | 0.3 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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# Appendix H

## Classification of the Recruitment and Retention Factors

## Appendix H

## Classification of the Recruitment and Retention Factors

The items included in Question 14 of the National Nursing Home Survey were grouped as follows:

1. Working Conditions
    - a. Clinical supervision available:
        - 1. By a master's prepared clinical specialist
        - 2. By experienced nursing home nurses
    - b. Career counseling
    - c. Job advancement possibility along clinical lines
    - d. Job advancement possibility along administrative lines
    - e. Not required to "float" to unfamiliar units
    - f. Availability of physicians
    - g. Availability of support service personnel and nonprofessionals to do nonnursing tasks
    - h. Well-equipped facility with functional nursing units
    - i. Use of facility as clinical center for nursing students
    - j. Opportunity for professional development such as participation in clinical nursing conferences and nursing research projects
    - k. Provision of in-service education
    - l. Provision of comprehensive orientation program for those newly hired
2. Scheduling
    - a. Ability to arrange work hours to work:
        - 1. During child's school hours
        - 2. During child's school term
        - 3. During weekdays only
        - 4. During weekends only
        - 5. Rotating shifts
        - 6. Day shift only
        - 7. Evening shift only
        - 8. Night shift only

3. Salary Considerations
    a. Pay differential for:
        1. Evening shift
        2. Night shift
        3. Weekend work
        4. Holiday work
    b. Pay differential or separate salary scale by educational preparation
    c. Graduated salary plan with increases according to:
        1. Length-of-service
        2. Merit

4. Benefits
    a. Graduated vacation plan varying according to length-of-service
    b. Leave of absence for maternity
    c. Child care facilities
    d. Free parking
    e. Convenient public transportation
    f. Meals at no cost or subsidized
    g. Subsidized housing
    h. Laundry of uniforms
    i. Insurance plans at no cost or partially paid for covering:
        1. Hospitalization
        2. Medical/surgical care
        3. Dental
        4. Life
    j. Retirement plan (other than Federal social security) partially or totally paid for by employer
    k. Availability of college tuition reimbursement plan
    l. Release time with pay fc continuing education
    m. Reimbursement for expenses for continuing education
    n. Security personnel available

5. Professional Opportunity
    a. Opportunity for professional development such as participation in clinical nursing conferences and nursing research projects
    b. Provision of in-service education
    c. Pay differential or separate salary scale by educational preparation
    d. Availability of college tuition reimbursement plan
    e. Release time with pay for continuing education
    f. Reimbursement for expenses for continuing education

## Appendix I

## Importance of Benefits, Working Conditions, Salary, Professional Opportunities, and Schedule to Retention by Age, Highest Educational Preparation, Ownership, and Size of Facility

## Appendix I-1

## Importance of Benefits to Retention by Selected Characteristics

Table I-1. Importance of benefits to retention by age.

|  | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
| Age | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total... | 99,707 | 100.0 | 15,446 | 15.5 | 48,875 | 49.0 | 32,863 | 33.0 | 2,524 | 2.5 |
| Under 35..... | 21,769 | 100.0 | 2,179 | 10.0 | 10,641 | 48.9 | 8,601 | 39.5 | 349(•) | 1.6(•) |
| 35 to 44..... | 25,253 | 100.0 | 3,711 | 14.7 | 12,241 | 48.5 | 8,852 | 35.1 | 449(•) | 1.8(•) |
| 45 to 54..... | 27,116 | 100.0 | 4,552 | 16.8 | 13,871 | 51.2 | 8,125 | 30.0 | 568(•) | 2.1(•) |
| 55 to 64..... | 21,193 | 100.0 | 4,158 | 19.6 | 10,211 | 48.2 | 6,138 | 29.0 | 686(•) | 3.2(•) |
| 65 and over.. | 3,536 | 100.0 | 656(•) | 18.6(•) | 1,574 | 44.5 | 993 | 28.1 | 312(•) | 8.8(•) |
| Unknown...... | 841 | 100.0 | 190(•) | 22.6(•) | 337(•) | 40.1(•) | 155(•) | 18.4(•) | 159(•) | 18.9(•) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total... | 3,098 | 0.0 | 940 | 0.9 | 2,074 | 1.3 | 1,536 | 1.1 | 399 | 0.4 |
| Under 35..... | 1,224 | 0.0 | 309 | 1.4 | 825 | 2.6 | 763 | 2.5 | 134 | 0.6 |
| 35 to 44..... | 1,264 | 0.0 | 444 | 1.6 | 880 | 2.5 | 722 | 2.2 | 156 | 0.6 |
| 45 to 54..... | 1,492 | 0.0 | 473 | 1.7 | 1,020 | 2.4 | 805 | 2.2 | 169 | 0.6 |
| 55 to 64..... | 1,251 | 0.0 | 505 | 2.1 | 855 | 2.8 | 822 | 2.4 | 225 | 1.0 |
| 65 and over.. | 497 | 0.0 | 177 | 4.7 | 349 | 7.0 | 281 | 6.6 | 121 | 3.4 |
| Unknown...... | 196 | 0.0 | 92 | 9.6 | 98 | 10.3 | 92 | 9.8 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-2. Importance of benefits to retention by the nurses highest educational preparation.

| Highest preparation | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total... | 99,707 | 100.0 | 15,448 | 15.5 | 48,875 | 49.0 | 32,863 | 33.0 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 2,383 | 10.9 | 10,774 | 49.3 | 8,242 | 37.7 | 444(*) | 2.0(*) |
| Diploma...... | 56,814 | 100.0 | 9,585 | 16.9 | 27,703 | 48.6 | 17,892 | 31.5 | 1,634 | 2.9 |
| Bachelors in nursing.... | 13,281 | 100.0 | 2,154 | 16.2 | 6,133 | 46.2 | 4,811 | 36.2 | 182(*) | 1.4(*) |
| Other........ | 7,227 | 100.0 | 1,202 | 16.6 | 4,007 | 55.4 | 1,765 | 24.4 | 254(*) | 3.5(*) |
| Unknown...... | 541(*) | 100.0(*) | 122(*) | 22.5(*) | 257(*) | 47.5(*) | 153(*) | 28.3(*) | 9(*) | 1.6(*) |
| **Standard errors** | | | | | | | | | | |
| Total... | 3,098 | 0.0 | 940 | 0.9 | 2,074 | 1.3 | 1,536 | 1.1 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 320 | 1.4 | 845 | 2.4 | 658 | 2.2 | 139 | 0.6 |
| Diploma...... | 2,255 | 0.0 | 745 | 1.2 | 1,418 | 1.7 | 1,173 | 1.5 | 344 | 0.6 |
| Bachelors in nursing.... | 1,022 | 0.0 | 320 | 2.4 | 754 | 4.0 | 651 | 3.9 | 76 | 0.6 |
| Other........ | 747 | 0.0 | 254 | 3.4 | 593 | 5.0 | 336 | 4.1 | 138 | 1.9 |
| Unknown...... | 153 | 0.0 | 66 | 11.0 | 108 | 14.2 | 86 | 13.2 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-3. Importance of benefits to retention by ownership.

| Ownership | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 15,446 | 15.5 | 48,875 | 49.0 | 32,863 | 33.0 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 10,587 | 18.6 | 27,972 | 49.0 | 17,233 | 30.2 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 3,934 | 12.7 | 14,580 | 47.1 | 11,414 | 36.9 | 996(*) | 3.2(*) |
| Government.... | 11,751 | 100.0 | 925 | 7.9 | 6,323 | 53.8 | 4,215 | 35.9 | 288(*) | 2.4(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 940 | 0.9 | 2,074 | 1.3 | 1,536 | 1.1 | 399 | 0.4 |
| Proprietary... | 2,351 | 0.0 | 820 | 1.2 | 1,455 | 1.6 | 1,062 | 1.4 | 233 | 0.4 |
| Nonprofit..... | 2,831 | 0.0 | 518 | 1.5 | 1,531 | 2.4 | 1,158 | 2.1 | 307 | 0.9 |
| Government.... | 1,560 | 0.0 | 217 | 1.8 | 1,024 | 4.3 | 748 | 4.2 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-4. Importance of benefits to retention by beds available.

|  | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
| Beds available | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 15,446 | 15.5 | 48,875 | 49.0 | 32,863 | 33.0 | 2,524 | 2.5 |
| 50 and less... | 8,587 | 100.0 | 1,806 | 21.0 | 3,896 | 45.4 | 2,288 | 26.6 | 597(*) | 7.0(*) |
| 51 to 99.. ... | 25,133 | 100.0 | 4,866 | 19.4 | 13,041 | 51.9 | 6,753 | 26.9 | 473(*) | 1.9(*) |
| 100 to 149.... | 24,972 | 100.0 | 3,456 | 13.8 | 13,558 | 54.3 | 7,272 | 29.1 | 686(*) | 2.7(*) |
| 150 to 199.... | 16,248 | 100.0 | 2,548 | 15.7 | 7,907 | 48.7 | 5,551 | 34.2 | 242(*) | 1.5(*) |
| 200 and over.. | 24,767 | 100.0 | 2,771 | 11.2 | 10,472 | 42.3 | 10,998 | 44.4 | 526(*) | 2.1(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 940 | 0.9 | 2,074 | 1.3 | 1,536 | 1.1 | 399 | 0.4 |
| 50 and less.... | 1,161 | 0.0 | 397 | 3.9 | 686 | 4.6 | 479 | 4.4 | 268 | 2.9 |
| 51 to 99....... | 1,897 | 0.0 | 557 | 2.1 | 1,253 | 2.5 | 769 | 2.0 | 139 | 0.6 |
| 100 to 149..... | 1,621 | 0.0 | 384 | 1.5 | 1,204 | 2.5 | 649 | 2.1 | 179 | 0.7 |
| 150 to 199..... | 1,492 | 0.0 | 462 | 2.2 | 832 | 2.9 | 661 | 2.6 | 87 | 0.5 |
| 200 and over... | 1,618 | 0.0 | 360 | 1.4 | 924 | 2.5 | 978 | 2.4 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table I-5. Importance of benefits to retention by physician availability.

| Physician availabilit- | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total... | 99,707 | 100.0 | 15,448 | 15.5 | 48,875 | 49.0 | 32,863 | 33.0 | 2,524 | 2.5 |
| On premises all times...... | 4,589 | 100.0 | 152(*) | 3.3(*) | 1,840 | 40.1 | 2,236 | 48.7 | 361(*) | 7.9(*) |
| On premises weekdays... | 15,708 | 100.0 | 1,734 | 11.0 | 6,865 | 43.7 | 6,683 | 42.5 | 427(*) | 2.7(*) |
| On premised scheduled times. | 56,562 | 100.0 | 9,457 | 16.7 | 28,848 | 51.0 | 16,928 | 29.9 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 2,874 | 19.6 | 7,274 | 49.6 | 4,212 | 28.7 | 314(*) | 2.1(*) |
| Other.......... | 2,498 | 100.0 | 603(*) | 24.2(*) | 1,119 | 44.8 | 723(*) | 28.9(*) | 53(*) | 2.1(*) |
| Unknown........ | 5,677 | 100.0 | 627(*) | 11.0(*) | 2,930 | 51.6 | 2,081 | 36.6 | 40(*) | 0.7(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total... | 3,098 | 0.0 | 940 | 0.9 | 2,074 | 1.3 | 1,536 | 1.1 | 399 | 0.4 |
| On premises all times.. | 1,159 | 0.0 | 110 | 2.2 | 568 | 7.3 | 633 | 6.9 | 185 | 3.2 |
| On premised weekdays... | 1,785 | 0.0 | 336 | 2.0 | 1,048 | 3.7 | 912 | 3.6 | 217 | 1.3 |
| On premises scheduled times. | 2,774 | 0.0 | 797 | 1.2 | 1,752 | 1.7 | 1,149 | 1.4 | 267 | 0.4 |
| On call only.. | 1,448 | 0.0 | 434 | 2.4 | 848 | 3.0 | 581 | 2.6 | 116 | 0.8 |
| Other.......... | 805 | 0.0 | 192 | 5.9 | 338 | 5.3 | 202 | 4.9 | 53 | 2.1 |
| Unknown........ | 1,010 | 0.0 | 186 | 2.9 | 625 | 4.8 | 428 | 4.2 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

# Appendix I-2

## Importance of Working Conditions to Retention by Selected Characteristics

Table I-6. Importance of working conditions to retention by age.

| Age | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 13,086 | 13.1 | 48,673 | 48.8 | 35,424 | 35.5 | 2,524 | 2.5 |
| Under 35...... | 21,769 | 100.0 | 1,649 | 7.6 | 10,983 | 50.5 | 8,789 | 40.4 | 349(*) | 1.6(*) |
| 35 to 44...... | 25,253 | 100.0 | 2,723 | 10.8 | 12,041 | 47.7 | 10,039 | 39.8 | 449(*) | 1.8(*) |
| 45 to 54...... | 27,116 | 100.0 | 3,980 | 14.7 | 13,411 | 49.5 | 9,156 | 33.8 | 568(*) | 2.1(*) |
| 55 to 64...... | 21,193 | 100.0 | 3,874 | 18.3 | 9,855 | 46.5 | 6,778 | 32.0 | 686(*) | 3.2(*) |
| 65 and over... | 3,536 | 100.0 | 764(*) | 21.6(*) | 1,932 | 54.6 | 528(*) | 14.9(*) | 312(*) | 8.8(*) |
| Unknown....... | 841 | 100.0 | 95(*) | 11.4(*) | 451(*) | 53.7(*) | 135(*) | 16.0(*) | 159(*) | 18.9(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 943 | 0.8 | 1,981 | 1.3 | 1,546 | 1.1 | 399 | 0.4 |
| Under 35....... | 1,224 | 0.0 | 274 | 1.2 | 793 | 2.5 | 730 | 2.3 | 134 | 0.6 |
| 35 to 44....... | 1,264 | 0.0 | 384 | 1.4 | 833 | 2.3 | 819 | 2.4 | 156 | 0.6 |
| 45 to 54....... | 1,492 | 0.0 | 567 | 1.8 | 965 | 2.7 | 806 | 2.3 | 169 | 0.6 |
| 55 to 64....... | 1,251 | 0.0 | 515 | 2.1 | 853 | 2.9 | 645 | 2.6 | 225 | 1.0 |
| 65 and over.... | 497 | 0.0 | 213 | 5.4 | 414 | 6.8 | 134 | 3.9 | 121 | 3.4 |
| Unknown........ | 196 | 0.0 | 61 | 6.9 | 135 | 11.4 | 67 | 7.5 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table I-6. Importance of working conditions to retention by age.

| Age | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 13,086 | 13.1 | 48,673 | 48.8 | 35,424 | 35.5 | 2,524 | 2.5 |
| Under 35...... | 21,769 | 100.0 | 1,649 | 7.6 | 10,983 | 50.5 | 8,789 | 40.4 | 349(*) | 1.6(*) |
| 35 to 44...... | 25,253 | 100.0 | 2,723 | 10.8 | 12,041 | 47.7 | 10,039 | 39.8 | 449(*) | 1.8(*) |
| 45 to 54...... | 27,116 | 100.0 | 3,980 | 14.7 | 13,411 | 49.5 | 9,158 | 33.8 | 568(*) | 2.1(*) |
| 55 to 64...... | 21,193 | 100.0 | 3,874 | 18.3 | 9,855 | 46.5 | 6,778 | 32.0 | 686(*) | 3.2(*) |
| 65 and over... | 3,536 | 100.0 | 764(*) | 21.6(*) | 1,932 | 54.6 | 528(*) | 14.9(*) | 312(*) | 8.8(*) |
| Unknown....... | 841 | 100.0 | 95(*) | 11.4(*) | 451(*) | 53.7(*) | 135(*) | 16.0(*) | 159(*) | 18.9(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 943 | 0.8 | 1,981 | 1.3 | 1,546 | 1.1 | 399 | 0.4 |
| Under 35....... | 1,224 | 0.0 | 274 | 1.2 | 793 | 2.5 | 730 | 2.3 | 134 | 0.6 |
| 35 to 44....... | 1,264 | 0.0 | 384 | 1.4 | 833 | 2.3 | 619 | 2.4 | 156 | 0.6 |
| 45 to 54....... | 1,492 | 0.0 | 567 | 1.8 | 965 | 2.7 | 803 | 2.3 | 169 | 0.6 |
| 55 to 64....... | 1,251 | 0.0 | 515 | 2.1 | 853 | 2.9 | 645 | 2.6 | 225 | 1.0 |
| 65 and over.... | 497 | 0.0 | 213 | 5.4 | 414 | 6.8 | 134 | 3.9 | 121 | 3.4 |
| Unknown........ | 196 | 0.0 | 61 | 6.9 | 135 | 11.4 | 67 | 7.5 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-7. Importance of working conditions to retention by highest edustional preparation.

| Highest preparation | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 13,086 | 13.1 | 48,673 | 48.8 | 35,424 | 35.5 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 1,905 | 8.7 | 10,949 | 50.1 | 8,544 | 39.1 | 444(•) | 2.0(•) |
| Diploma....... | 56,814 | 100.0 | 8,185 | 14.4 | 28,264 | 49.7 | 18,731 | 33.0 | 1,634 | 2.9 |
| Bachelors in nursing..... | 13,281 | 100.0 | 1,835 | 13.8 | 6,327 | 47.6 | 4,937 | 37.2 | 182(•) | 1.4(•) |
| Other......... | 7,227 | 100.0 | 1,024 | 14.2 | 2,918 | 40.4 | 3,032 | 41.9 | 254(•) | 3.5(•) |
| Unknown....... | 541(•) | 100.0(•) | 137(•) | 25.3(•) | 215(•) | 39.7(•) | 181(•) | 33.4(•) | 9(•) | 1.6(•) |
| **Standard errors** | | | | | | | | | | |
| Total..... | 3,098 | 0.0 | 943 | 0.8 | 1,981 | 1.3 | 1,646 | 1.1 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 268 | 1.2 | 899 | 2.6 | 689 | 2.5 | 139 | 0.6 |
| Diploma........ | 2,255 | 0.0 | 752 | 1.2 | 1,464 | 1.7 | 1,165 | 1.6 | 344 | 0.6 |
| Bachelors in nursing...... | 1,022 | 0.0 | 474 | 3.2 | 635 | 3.5 | 551 | 3.2 | 76 | 0.6 |
| Other.......... | 747 | 0.0 | 199 | 2.8 | 526 | 5.4 | 486 | 5.2 | 138 | 1.9 |
| Unknown........ | 153 | 0.0 | 70 | 11.6 | 80 | 13.1 | 110 | 15.1 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-8. Importance of working condition to retention by ownership.

| Ownership | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 13,086 | 13.1 | 48,673 | 48.8 | 35,424 | 35.5 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 8,210 | 14.4 | 28,432 | 49.9 | 19,151 | 33.6 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 3,840 | 12.4 | 14,443 | 46.7 | 11,645 | 37.7 | 996(*) | 3.2(*) |
| Government.... | 11,751 | 1000.0 | 1,035 | 8.8 | 5,799 | 49.4 | 4,629 | 39.4 | 288(*) | 2.4(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 943 | 0.8 | 1,981 | 1.3 | 1,546 | 1.1 | 399 | 0.4 |
| Proprietary.... | 2,351 | 0.0 | 667 | 1.0 | 1,500 | 1.5 | 1,109 | 1.4 | 233 | 0.4 |
| Nonprofit.. ... | 2,631 | 0.0 | 681 | 1.7 | 1,345 | 2.3 | 1,146 | 2.0 | 307 | 0.9 |
| Government..... | 1,560 | 0.0 | 240 | 1.9 | 1,058 | 4.9 | 736 | 4.3 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table I-9. Importance of working conditions to retention by number of beds that are available.

| Beds available | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 13,086 | 13.1 | 48,673 | 48.8 | 35,424 | 35.5 | 2,524 | 2.5 |
| 50 or less.... | 8,587 | 100.0 | 1,534(*) | 17.9(*) | 3,930 | 45.8 | 2,526 | 29.4 | 597(*) | 7.0(*) |
| 51 to 99...... | 25,133 | 100.0 | 4,070 | 16.2 | 12,528 | 49.8 | 8,082 | 32.1 | 473(*) | 1.9(*) |
| 100 to 149.... | 24,972 | 100.0 | 3,281 | 13.1 | 12,542 | 50.2 | 8,464 | 33.9 | 686(*) | 2.7(*) |
| 150 to 199.... | 16,249 | 100.0 | 1,723 | 10.6 | 7,498 | 46.1 | 6,786 | 41.8 | 242(*) | 1.5(*) |
| 200 and over.. | 24,767 | 100.0 | 2,477 | 10.0 | 12,177 | 49.2 | 9,587 | 38.7 | 526(*) | 2.1(*) |
| **Standard errors** | | | | | | | | | | |
| Total..... | 3,098 | 0.0 | 943 | 0.8 | 1,981 | 1.3 | 1,546 | 1.1 | 399 | 0.4 |
| 50 or less..... | 1,161 | 0.0 | 409 | 4.2 | 674 | 5.4 | 556 | 4.8 | 268 | 2.9 |
| 51 to 99....... | 1,897 | 0.0 | 576 | 1.7 | 1,132 | 2.6 | 819 | 2.3 | 139 | 0.6 |
| 100 to 149..... | 1,621 | 0.0 | 407 | 1.4 | 1,072 | 2.3 | 674 | 2.0 | 179 | 0.7 |
| 150 to 199..... | 1,492 | 0.0 | 281 | 1.6 | 780 | 2.6 | 821 | 2.6 | 87 | 0.5 |
| 200 and over... | 1,818 | 0.0 | 434 | 1.6 | 1,057 | 2.6 | 817 | 2.3 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-10. Importance of working conditions to retention by availability of physician's services.

| Physician availability | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 13,086 | 13.1 | 48,673 | 48.8 | 35,424 | 35.5 | 2,524 | 2.5 |
| On premise all times....... | 4,589 | 100.0 | 352(*) | 7.7(*) | 2,130 | 46.4 | 1,746 | 38.0 | 361(*) | 7.9(*) |
| On premise weekdays.... | 15,708 | 100.0 | 1,183 | 7.5 | 7,424 | 47.3 | 6,675 | 42.5 | 427(*) | 2.7(*) |
| On premise scheduled times. | 56,562 | 100.0 | 8,102 | 14.3 | 28,010 | 49.5 | 19,121 | 33.8 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 2,447 | 16.7 | 7,103 | 48.4 | 4,809 | 32.8 | 314(*) | 2.1(*) |
| Other......... | 2,498 | 100.0 | 346(*) | 13.8(*) | 1,228 | 49.1 | 872 | 34.9 | 53(*) | 2.1(*) |
| Unknown....... | 5,677 | 100.0 | 656(*) | 11.5(*) | 2,780 | 49.0 | 2,202 | 38.8 | 40(*) | 0.7(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 943 | 0.8 | 1,981 | 1.3 | 1,546 | 1.1 | 399 | 0.4 |
| On premise all times........ | 1,159 | 0.0 | 189 | 3.4 | 709 | 10.0 | 502 | 6.8 | 185 | 3.2 |
| On premise daytime......... | 1,785 | 0.0 | 250 | 1.5 | 1,079 | 3.6 | 910 | 3.6 | 217 | 1.3 |
| On premise scheduled time... | 2,774 | 0.0 | 795 | 1.1 | 1,589 | 1.5 | 1,204 | 1.4 | 257 | 0.4 |
| On call........ | 1,448 | 0.0 | 443 | 2.4 | 796 | 2.9 | 614 | 2.7 | 118 | 0.8 |
| Other.......... | 605 | 0.0 | 143 | 5.0 | 415 | 9.7 | 263 | 7.2 | 53 | 2.1 |
| Unknown........ | 1,010 | 0.0 | 186 | 2.9 | 607 | 5.0 | 459 | 4.5 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

# Appendix I-3

## Importance of Salary to Retention by Selected Characteristics

Table I-11. Importance of salary to retention by age.

| | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| Age | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total... | 99,707 | 100.0 | 12,703 | 12.7 | 18,413 | 18.5 | 66,068 | 66.3 | 2,524 | 2.5 |
| Under 35..... | 21,769 | 100.0 | 2,153 | 9.9 | 4,054 | 18.6 | 15,214 | 69.9 | 349(*) | 1.6(*) |
| 35 to 44..... | 25,253 | 100.0 | 2,747 | 10.9 | 4,711 | 18.7 | 17,346 | 68.7 | 449(*() | 1.8(*) |
| 45 to 54..... | 27,116 | 100.0 | 3,695 | 13.6 | 4,913 | 18.1 | 17,940 | 66.2 | 568(*) | 2.1(*) |
| 55 to 64..... | 21,193 | 100.0 | 3,434 | 16.2 | 4,017 | 19.0 | 13,056 | 61.6 | 686(*) | 3.2(*) |
| 65 nd over... | 3,536 | 100.0 | 597(*) | 16.9(*) | 491(*) | 13.9(*) | 2,135 | 60.4 | 312(*) | 8.8(*) |
| Unknown...... | 841 | 100.0 | 77(*) | 9.1(*) | 227(*) | 27.0(*) | 378(*) | 45.0(*) | 159(*) | 18.9(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 807 | 0.8 | 1,271 | 1.1 | 2,508 | 1.3 | 399 | 0.- |
| Under 35...... | 1,224 | 0.0 | 334 | 1.5 | 515 | 2.0 | 982 | 2.3 | 134 | 0.6 |
| 35 to 44...... | 1,264 | 0.0 | 351 | 1.3 | 560 | 1.9 | 1,031 | 2.2 | 156 | 0.6 |
| 45 to 54...... | 1,492 | 0.0 | 407 | 1.5 | 569 | 1.9 | 1,285 | 2.3 | 169 | 2.1 |
| 55 to 64...... | 1,251 | 0.0 | 452 | 1.9 | 501 | 2.1 | 972 | 2.3 | 225 | 1.0 |
| 65 and over... | 497 | 0.0 | 156 | 4.2 | 167 | 4.4 | 423 | 6.7 | 121 | 3.4 |
| Unknown....... | 196 | 0.0 | 60 | 6.7 | 98 | 9 8 | 115 | 11.4 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-12. Importance of salary to retention by highest educational preparation.

| Highest preparation | Total Number | Total Percent | Low Number | Low Percent | Medium Number | Medium Percent | High Number | High Percent | Unknown Number | Unknown Percent |
|---|---|---|---|---|---|---|---|---|---|---|
| **Estimates** | | | | | | | | | | |
| Total... | 99,707 | 100.0 | 12,703 | 12.7 | 18,413 | 18.5 | 66,068 | 66.3 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.C | 2,094 | 9.6 | 3,962 | 18.1 | 15,342 | 70.2 | 444(•) | 2.0(•) |
| Diploma...... | 56,814 | 100.0 | 7,801 | 13.7 | 10,034 | 17.7 | 37,345 | 65.7 | 1,634 | 2.9 |
| Bachelors in nursing.... | 13,281 | 100.0 | 1,604 | 12.1 | 2,765 | 20.8 | 8,730 | 65.7 | 182(•) | 1.4(•) |
| Other........ | 7,227 | 100.0 | 1,084 | 15.0 | 1,533 | 21.2 | 4,353 | 60.3 | 254(•) | 3.5(•) |
| Unknown...... | 541(•) | 100.0(•) | 119(•) | 22.1(•) | 119(•) | 22.0(•) | 294(•) | 54.3(•) | 9(•) | 1.6(•) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 807 | 0.8 | 1,271 | 1.1 | 2,508 | 1.3 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 278 | 1.2 | 498 | 2.0 | 995 | 2.2 | 139 | 0.6 |
| Diploma....... | 2,255 | 0.0 | 691 | 1.1 | 827 | 1.3 | 1,777 | 1.6 | 344 | 0.6 |
| Bachelors in nursing..... | 1,022 | 0.0 | 265 | 2.0 | 428 | 2.9 | 884 | 3.4 | 76 | 0.6 |
| Other......... | 747 | 0.0 | 214 | 2.9 | 393 | 4.6 | 573 | 4.9 | 138 | 1.9 |
| Unknown....... | 153 | 0.0 | 65 | 11.0 | 83 | 13.1 | 110 | 14.2 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-13. Importance of salary to retention by ownership.

| Ownership | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 12,703 | 12.7 | 18,413 | 18.5 | 66,068 | 66.3 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 8,644 | 15.2 | 10,435 | 18.3 | 36,713 | 64.4 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 3,225 | 10.4 | 6,150 | 19.9 | 20,552 | 66.6 | 998(•) | 3.2(•) |
| Government.... | 11,751 | 100.0 | 833(•) | 7.1(•) | 1,827 | 15.5 | 8,803 | 74.9 | 288(•) | 2.4(•) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 807 | 0.8 | 1,271 | 1.1 | 2,508 | 1.3 | 399 | 0.4 |
| Proprietary .. | 2,351 | 0.0 | 708 | 1.1 | 843 | 1.3 | 1,742 | 1.5 | 233 | 0.4 |
| Nonprofit..... | 2,361 | 0.0 | 427 | 1.3 | 965 | 2.5 | 1,959 | 2.7 | 307 | 0.9 |
| Government.... | 1,560 | 0.0 | 212 | 1.8 | 401 | 2.9 | 1,325 | 3.7 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table I-14. Importance of salary to retention by number of bed available.

| Number of beds available | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 12,703 | 12.7 | 18,413 | 18.5 | 66,068 | 66.3 | 2,524 | 2.5 |
| 50 or less.... | 8,587 | 100.0 | 1,832 | 21.3 | 2,157 | 25.1 | 4,001 | 46.6 | 597(*) | 7.0(*) |
| 51 to 99...... | 25,133 | 100.0 | 3,638 | 14.5 | 4,225 | 16.8 | 16,797 | 66.8 | 473(*) | 1.9(*) |
| 100 to 149.... | 24,972 | 100.0 | 3,132 | 12.5 | 4,089 | 16.4 | 17,065 | 68.3 | 686(*) | 2.7(*) |
| 150 to 199.... | 16,248 | 100.0 | 1,963 | 12.1 | 3,096 | 19.1 | 10,948 | 67.4 | 242(*) | 1.5(*) |
| 200 and over.. | 24,767 | 100.0 | 2,139 | 8.6 | 4,846 | 19.6 | 18,257 | 69.7 | 526(*) | 2.1(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 807 | 0.8 | 1,271 | 1.1 | 2,508 | 1.3 | 399 | 0.4 |
| 50 or less.... | 1,161 | 0.0 | 449 | 4.2 | 671 | 6.4 | 614 | 5.7 | 268 | 2.9 |
| 51 to 99...... | 1,897 | 0.0 | 408 | 1.6 | 621 | 2.2 | 1,616 | 2.8 | 139 | 0.6 |
| 100 to 149.... | 1,621 | 0.0 | 364 | 1.3 | 431 | 1.6 | 1,328 | 2.2 | 179 | 0.7 |
| 150 to 199.... | 1,492 | 0.0 | 319 | 1.8 | 536 | 2.5 | 1,065 | 2.7 | 87 | 0.5 |
| 200 and over.. | 1,618 | 0.0 | 309 | 1.3 | 639 | 2.1 | 1,283 | 2.2 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table I-15. Importance of salary to retention by availability of physician's services.

| Physician availability | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 12,703 | 12.7 | 18,413 | 18.5 | 66,068 | 66.3 | 2,524 | 2.5 |
| On premise all times....... | 4,589 | 100.0 | 334(*) | 7.3(*) | 657(*) | 14.3(*) | 3,237 | 70.5 | 361(*) | 7.9(*) |
| On premise weekdays.... | 15,708 | 100.0 | 1,305 | 8.3 | 2,847 | 18.1 | 11,129 | 70.8 | 427(*) | 2.7(*) |
| On premise scheduled times. | 56,562 | 100.0 | 7,257 | 12.8 | 9,898 | 17.5 | 38,078 | 67.3 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 2,413 | 16.4 | 2,988 | 20.4 | 8,958 | 61.0 | 314(*) | 2.1(*) |
| Other.......... | 2,498 | 100.0 | 561(*) | 22.5(*) | 516(*) | 20.6(*) | 1,369 | 54.8 | 53(*) | 2.1(*) |
| Unknown....... | 5,677 | 100.0 | 832(*) | 14.7(*) | 1,507 | 26.5 | 3,298 | 58.1 | 40(*) | 0.7(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 807 | 0.8 | 1,271 | 1.1 | 2,608 | 1.3 | 399 | 0.4 |
| On premise all times....... | 1,159 | 0.0 | 176 | 3.1 | 271 | 5.6 | 379 | 6.6 | 186 | 3.2 |
| On premise day time......... | 1,785 | 0.0 | 286 | 1.7 | 631 | 3.1 | 1,364 | 3.6 | 217 | 1.3 |
| On premise scheduled time.. | 2,774 | 0.0 | 652 | 1.1 | 872 | 1.3 | 2,172 | 1.0 | 257 | 0.4 |
| On call only.. | 1,448 | 0.0 | 368 | 2.0 | 487 | 2.6 | 1,020 | 3.3 | 116 | 0.8 |
| Other.......... | 605 | 0.0 | 191 | 4.8 | 180 | 4.9 | 360 | 6.6 | 53 | 2.1 |
| Unknown... .... | 1,010 | 0.0 | 215 | 3.3 | 567 | 7.7 | 585 | 7.0 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25

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## Appendix I-4

## Importance of Professional Opportunities to Retention by Selected Characteristics

Table I-16. Importance of professional opportunities to retention by age.

| Age | Level of importance | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 18,734 | 18.8 | 48,206 | 48.3 | 30,245 | 30.3 | 2,524 | 2.5 |
| Under 35...... | 21,769 | 100.0 | 2,312 | 10.6 | 11,403 | 52.4 | 7,706 | 35.4 | 349(*) | 1.6(*) |
| 35 to 44...... | 25,253 | 100.0 | 4,549 | 18.0 | 11,520 | 45.6 | 8,735 | 34.6 | 449(*) | 1.8(*) |
| 45 to 54...... | 27,116 | 100.0 | 5,842 | 21.5 | 12,897 | 47.6 | 7,809 | 28.8 | 568(*) | 2.1(*) |
| 55 to 64...... | 21,193 | 100.0 | 4,932 | 23.3 | 10,383 | 49.0 | 5,192 | 24.5 | 686(*) | 3.2(*) |
| 65 and over... | 3,536 | 100.0 | 983 | 27.8 | 1,524 | 43.1 | 716(*) | 20.3(*) | 312(*) | 8.8(*) |
| Unknown....... | 841 | 100.0 | 117(*) | 13.9(*) | 478(*) | 56.9(*) | 87(*) | 10.3(*) | 159(*) | 18.9(*) |
| **Standard errors** | | | | | | | | | | |
| Total..... | 3,098 | 0.0 | 1,039 | 0.9 | 2,056 | 1.2 | 1,421 | 1.1 | 399 | 0.4 |
| Under 35....... | 1,224 | 0.0 | 337 | 1.5 | 857 | 2.6 | 683 | 2.4 | 134 | 0.6 |
| 35 to 44....... | 1,264 | 0.0 | 479 | 1.7 | 892 | 2.5 | 709 | 2.3 | 156 | 0.6 |
| 45 to 54....... | 1,492 | 0.0 | 586 | 1.9 | 939 | 2.3 | 780 | 2.2 | 169 | 0.6 |
| 55 to 64....... | 1,251 | 0.0 | 535 | 2.2 | 906 | 2.9 | 549 | 2.3 | 225 | 1.0 |
| 65 and over.... | 497 | 0.0 | 250 | 6.2 | 325 | 7.1 | 269 | 6.6 | 121 | 3.4 |
| Unknown........ | 196 | 0.0 | 66 | 7.4 | 137 | 11.3 | 56 | 6.4 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table I-17. Importance of professional opportunities to retention by the nurses highest educational preparation.

| Highest preparation | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 18,734 | 18.8 | 48,205 | 48.3 | 30,245 | 30.3 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 2,914 | 13.3 | 11,140 | 51.0 | 7,344 | 33.6 | 444(*) | 2.0(*) |
| Diploma....... | 56,814 | 100.0 | 12,566 | 22.1 | 26,840 | 47.2 | 15,774 | 27.8 | 1,634 | 2.9 |
| Bachelors in nursing..... | 13,281 | 100.0 | 1,982 | 14.9 | 6,332 | 47.7 | 4,784 | 36.0 | 182(*) | 1.4(*) |
| Other......... | 7,227 | 100.0 | 1,101 | 15.2 | 3,642 | 50.4 | 2,231 | 30.9 | 254(*) | 3.5(*) |
| Unknown....... | 541(*) | 100.0(*) | 171(*) | 31.5(*) | 250(*) | 46.3(*) | 112(*) | 20.6(*) | 9(*) | 1.6(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 1,039 | 0.9 | 2,056 | 1.2 | 1,421 | 1.1 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 364 | 1.6 | 863 | 2.4 | 609 | 2.2 | 139 | 0.6 |
| Diploma........ | 2,256 | 0.0 | 880 | 1.3 | 1,347 | 1.6 | 1,102 | 1.5 | 344 | 0.6 |
| Bachelors in nursing...... | 1,022 | 0.0 | 293 | 2.2 | 749 | 3.8 | 619 | 3.7 | 76 | 0.6 |
| Other.......... | 747 | 0.0 | 245 | 3.3 | 569 | 5.0 | 361 | 4.2 | 138 | 1.9 |
| Unknown........ | 153 | 0.0 | 75 | 12.3 | 109 | 14.2 | 77 | 12.4 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-18. Importance of professional opportunities to retention by ownership.

| | | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Low | | Medium | | High | | Unknown | |
| Ownership | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 18,734 | 18.8 | 48,205 | 48.3 | 30,245 | 30.3 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 12,171 | 21.3 | 27,159 | 47.6 | 16,462 | 28.9 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 5,269 | 17.0 | 14,857 | 48.0 | 9,802 | 31.7 | 996(•) | 3.2(•) |
| Government.... | 11,751 | 100.0 | 1,293 | 11.0 | 6,188 | 52.7 | 3,982 | 33.9 | 288(•) | 2.4(•) |
| **Standard errors** | | | | | | | | | | |
| Total .... | 3,098 | 0 | 1,039 | 0.9 | 2,056 | 1.2 | 1,421 | 1.1 | 399 | 0.4 |
| Proprietary.... | 2,351 | 0 | 872 | 1.2 | 1,380 | 1.4 | 1,005 | 1.4 | 233 | 0.4 |
| Nonprofit...... | 2,631 | 0 | 648 | 1.8 | 1,567 | 2.4 | 1,007 | 2.0 | 307 | 0.9 |
| Governmental... | 1,560 | 0 | 265 | 2.1 | 1,040 | 4.5 | 732 | 4.4 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-19. Importance of professional opportunities to retention by available beds.

| Available beds | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 18,734 | 18.8 | 48,205 | 48.3 | 30,245 | 30.3 | 2,524 | 2.5 |
| 50 or less.... | 8,587 | 100.0 | 1,914 | 22.3 | 4,427 | 51.6 | 1,649 | 19.2 | 597(*) | 7.0(*) |
| 51 to 99...... | 25,133 | 100.0 | 5,594 | 22.3 | 12,942 | 51.5 | 6,123 | 24.4 | 473(*) | 1.9(*) |
| 100 to 149.... | 24,972 | 100.0 | 4,688 | 18.8 | 12,548 | 50.2 | 7,051 | 28.2 | 686(*) | 2.7(*) |
| 150 to 199.... | 16,248 | 100.0 | 2,942 | 18.1 | 7,697 | 47.4 | 5,367 | 33.0 | 242(*) | 1.5(*) |
| 200 and over.. | 24,767 | 100.0 | 3,596 | 14.5 | 10,591 | 42.8 | 10,055 | 40.6 | 526(*) | 2.1(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0 | 1,039 | 0.9 | 2,058 | 1.2 | 1,421 | 1.1 | 399 | 0.4 |
| 50 or less..... | 1,161 | 0 | 430 | 3.9 | 772 | 5.2 | 379 | 4.1 | 268 | 2.9 |
| 51 to 99....... | 1,897 | 0 | 607 | 2.2 | 1,232 | 2.4 | 718 | 2.0 | 139 | 0.6 |
| 100 to 149..... | 1,621 | 0 | 488 | 1.7 | 1,128 | 2.4 | 612 | 2.1 | 179 | 0.7 |
| 150 to 199..... | 1,492 | 0 | 479 | 2.2 | 777 | 2.6 | 645 | 2.5 | 87 | 0.5 |
| 200 or more.... | 1,618 | 0 | 415 | 1.5 | 949 | 2.5 | 902 | 2.4 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table I-20. Importance of professional opportunities to retention by availability of physician's services.

| Physician availability | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 18,734 | 18.8 | 48,205 | 48.3 | 30,245 | 30.3 | 2,524 | 2.5 |
| On premise all times....... | 4,589 | 100.0 | 460(*) | 10.0(*) | 1,839 | 40.1 | 1,929 | 42.0 | 381(*) | 7.9(*) |
| On premise weekdays.... | 15,708 | 100.0 | 1,765 | 11.2 | 7,574 | 48.2 | 5,942 | 37. | 427(*) | 2.7(*) |
| On premise scheduled times. | 56,562 | 100.0 | 11,830 | 20.9 | 27,707 | 49.0 | 15,696 | 27.7 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 3,265 | 22.2 | 6,934 | 47.3 | 4,170 | 28.4 | 314(*) | 2.1(*) |
| Other......... | 2,498 | 100.0 | 587(*) | 23.5(*) | 1,071 | 42.9 | 787(*) | 31.5(*) | 53(*) | 2.1(*) |
| Unknown....... | 5,677 | 100.0 | 836(*) | 14.7(*) | 3,081 | 54.3 | 1,720 | 30.3 | 40(*) | 0.7(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 1,039 | 0.9 | 2,056 | 1.2 | 1,421 | 1.1 | 399 | 0.4 |
| On premise all times........ | 1,159 | 0.0 | 193 | 3.4 | 578 | 7.0 | 550 | 6.9 | 185 | 3.2 |
| On premise weekdays..... | 1,785 | 0.0 | 321 | 1.9 | 1,119 | 3.6 | 826 | 3.4 | 217 | 1.3 |
| On premise scheduled times.. | 2,774 | 0.0 | 906 | 1.3 | 1,640 | 1.5 | 1,071 | 1.3 | 257 | 0.4 |
| On call only... | 1,448 | 0.0 | 466 | 2.4 | 833 | 2.8 | 527 | 2.4 | 116 | 0.8 |
| Other.......... | 605 | 0.0 | 200 | 6.1 | 393 | 10.5 | 257 | 7.5 | 53 | 2.1 |
| Unknown........ | 1,010 | 0.0 | 209 | 3.2 | 736 | 6.3 | 388 | 5.5 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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## Appendix I-5

## Importance of Schedule to Retention by Selected Characteristics

Table I-21. Importance of schedule to retention by age.

| Age | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 26,430 | 26.5 | 38,367 | 38.5 | 32,387 | 32.5 | 2,524 | 2.5 |
| Under 35...... | 21,769 | 100.0 | 4,880 | 22.4 | 10,354 | 47.6 | 6,188 | 28.4 | 349(•) | 1.6(•) |
| 35 to 44...... | 25,253 | 100.0 | 5,987 | 23.7 | 10,151 | 40.2 | 8,665 | 34.3 | 449(•) | 1.8(•) |
| 45 to 54...... | 27,116 | 100.0 | 7,433 | 27.4 | 10,139 | 37.4 | 8,975 | 33.1 | 568(•) | 2.1(•) |
| 55 to 64...... | 21,193 | 100.0 | 6,266 | 29.6 | 6,818 | 32.2 | 7,423 | 35.0 | 686(•) | 3.2(•) |
| 65 and over... | 3,536 | 100.0 | 1,590 | 45.0 | 717(•) | 20.3(•) | 916 | 25.9 | 312(•) | 8.8(•) |
| Unknown....... | 841 | 100.0 | 274(•) | 32.6(•) | 188(•) | 22.3(•) | 219(•) | 26.1(•) | 159(•) | 18.9(•) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 1,250 | 1.1 | 1,791 | 1.2 | 1,589 | 1.2 | 399 | 0.4 |
| Under 35....... | 1,224 | 0.0 | 437 | 1.9 | 838 | 2.6 | 568 | 2.2 | 134 | 0.6 |
| 35 to 44....... | 1,264 | 0.0 | 562 | 1.9 | 758 | 2.4 | 789 | 2.4 | 156 | 0.6 |
| 45 to 54....... | 1,492 | 0.0 | 322 | 2.1 | 1,045 | 2.8 | 795 | 2.4 | 169 | 0.6 |
| 55 to 64....... | 1,251 | 0.0 | 643 | 2.6 | 548 | 2.6 | 783 | 2.8 | 225 | 1.0 |
| 65 and over.... | 497 | 0.0 | 364 | 7.3 | 233 | 5.9 | 235 | 6.0 | 121 | 3.4 |
| Unknown........ | 196 | 0.0 | 96 | 10.1 | 77 | 8.3 | 107 | 10.7 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: •This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-22. Importance of schedule to retention by highest edustional preparation.

| Highest preparation | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 26,430 | 26.5 | 38,367 | 38.5 | 32,387 | 32.5 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 5,549 | 25.4 | 8,879 | 40.6 | 6,971 | 31.9 | 444(*) | 2.0(*) |
| Diploma....... | 56,814 | 100.0 | 14,964 | 26.3 | 21,317 | 37.5 | 18,900 | 33.3 | 1,634 | 2.9 |
| Bachelor in nursing..... | 13,281 | 100.0 | 3,900 | 29.4 | 5,288 | 39.8 | 3,911 | 29.4 | 182(*) | 1.4(*) |
| Other......... | 7,227 | 100.0 | 1,770 | 24.5 | 2,639 | 36.5 | 2,565 | 35.5 | 254(*) | 3.5(*) |
| Unknown....... | 541(*) | 100.0(*) | 248(*) | 45.8(*) | 245(*) | 45.3(*) | 40(*) | 7.3(*) | 9(*) | 1.6(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 1,250 | 1.1 | 1,791 | 1.2 | 1,589 | 1.2 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 521 | 2.0 | 698 | 2.4 | 717 | 2.6 | 139 | 0.6 |
| Diploma........ | 2,255 | 0.0 | 981 | 1.5 | 1,284 | 1.6 | 1,217 | 1.6 | 344 | 0.6 |
| Bachelors in nursing...... | 1,022 | 0.0 | 502 | 3.2 | 667 | 3.6 | 501 | 3.1 | 76 | 0.6 |
| Other.......... | 747 | 0.0 | 274 | 3.7 | 461 | 4.9 | 486 | 5.1 | 138 | 1.9 |
| Unknown........ | 153 | 0.0 | 102 | 14.1 | 110 | 14.3 | 28 | 5.2 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-23. Importance of schedule to retention by ownership.

| Ownership | Total |  | Level of importance: Low |  | Medium |  | High |  | Unknown |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 99,707 | 100.0 | 26,430 | 26.5 | 38,367 | 38.5 | 32,387 | 32.5 | 2,524 | 2.5 |
| Proprietary.... | 57,033 | 100.0 | 16,804 | 29.5 | 20,869 | 36.6 | 18,119 | 31.8 | 1,240 | 2.2 |
| Nonprofit....... | 30,924 | 100.0 | 6,820 | 22.1 | 12,921 | 41.8 | 10,187 | 32.9 | 996(*) | 3.2(*) |
| Government .... | 11,751 | 100.0 | 2,806 | 23.9 | 4,577 | 38.9 | 4,081 | 34.7 | 288(*) | 2.4(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 1,250 | 1.1 | 1,791 | 1.2 | 1,589 | 1.2 | 399 | 0.4 |
| Proprietary.... | 2,351 | 0.0 | 1,048 | 1.4 | 1,128 | 1.3 | 1,190 | 1.5 | 233 | 0.4 |
| Nonprofit....... | 2,631 | 0.0 | 725 | 2.0 | 1,461 | 2.4 | 1,098 | 2.3 | 307 | 0.9 |
| Government..... | 1,560 | 0.0 | 534 | 3.4 | 767 | 4.2 | 687 | 3.1 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table I-24. Importance of schedule to retention by number of beds that are available.

| Beds available | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 99,707 | 100.0 | 26,430 | 26.5 | 38,367 | 38.5 | 32,387 | 32.5 | 2,524 | 2.5 |
| 50 or less..... | 8,587 | 100.0 | 2,181 | 25.4 | 3,461 | 40.3 | 2,348 | 27.3 | 597(*) | 7.0(*) |
| 51 to 99....... | 25,133 | 100.0 | 7,842 | 31.2 | 9,329 | 37.1 | 7,488 | 29.8 | 473(*) | 1.9(*) |
| 100 to 149..... | 24,972 | 100.0 | 6,949 | 27.8 | 9,691 | 38.8 | 7,646 | 30.6 | 686(*) | 2.7(*) |
| 150 to 199..... | 16,248 | 100.0 | 3,766 | 23.2 | 6,219 | 38.3 | 6,022 | 37.1 | 242(*) | 1.5(*) |
| 200 and over... | 24,767 | 100.0 | 5,693 | 23.0 | 9,667 | 39.0 | 8,882 | 35.9 | 526(*) | 2.1(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 1,250 | 1.1 | 1,791 | 1.2 | 1,589 | 1.2 | 399 | 0.4 |
| 50 or less..... | 1,161 | 0.0 | 399 | 4.1 | 620 | 4.0 | 421 | 2.9 | 268 | 2.9 |
| 51 to 99....... | 1,897 | 0.0 | 721 | 2.7 | 1,098 | 2.5 | 881 | 2.5 | 139 | 0.6 |
| 100 to 149..... | 1,621 | 0.0 | 702 | 2.0 | 825 | 2.2 | 723 | 2.2 | 179 | 0.7 |
| 150 to 199 .... | 1,492 | 0.0 | 449 | 2.4 | 677 | 2.6 | 863 | 3.3 | 87 | 0.5 |
| 200 and over... | 1,618 | 0.0 | 632 | 2.1 | 940 | 2.6 | 782 | 2.3 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table I-25. Importance of schedule to retention by availability of physician's services.

| Physician's availability | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 26,430 | 26.5 | 38,387 | 38.5 | 32,387 | 32.5 | 2,524 | 2.5 |
| On premise all times....... | 4,589 | 100.0 | 379(*) | 8.2(*) | 2,101 | 45.8 | 1,749 | 28.1 | 361(*) | 7.9(*) |
| On premise weekdays........ | 15,708 | 100.0 | 3,612 | 23.0 | 5,327 | 33.9 | 6,342 | 40.4 | 427(*) | 2.7(*) |
| On premise scheduled times. | 56,562 | 100.0 | 15,040 | 26.6 | 22,701 | 40.1 | 17,492 | 30.9 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 5,236 | 35.7 | 5,095 | 34.7 | 4,028 | 27.5 | 314(*) | 2.1(*) |
| Other......... | 2,498 | 100.0 | 876(*) | 35.0(*) | 615 | 24.6 | 956 | 38.2 | 53(*) | 2.1(*) |
| Unknown....... | 5,677 | 100.0 | 1,288 | 22.7 | 2,528 | 44.5 | 1,821 | 32.1 | 40(*) | 0.7(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total..... | 3,098 | 0.0 | 1,250 | 1.1 | 1,791 | 1.2 | 1,589 | 1.2 | 399 | 0.4 |
| On premise all times........ | 1,159 | 0.0 | 162 | 3.3 | 597 | 6.8 | 512 | 6.8 | 185 | 3.2 |
| On premise weekdays......... | 1,765 | 0.0 | 600 | 2.5 | 794 | 3.4 | 863 | 3.3 | 217 | 1.3 |
| On premise scheduled time... | 2,774 | 0.0 | 1,011 | 1.5 | 1,620 | 1.5 | 1,272 | 1.8 | 257 | 0.4 |
| On call only... | 1,448 | 0.0 | 651 | 2.8 | 643 | 2.4 | 541 | 2.7 | 116 | 0.8 |
| Other.......... | 605 | 0.0 | 252 | 5.4 | 178 | 5.2 | 310 | 6.7 | 53 | 2.1 |
| Unknown.. ..... | 1,010 | 0.0 | 309 | 4.5 | 588 | 5.3 | 392 | 4.0 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey.

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: *This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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# Appendix J

## Importance of Benefits, Working Conditions, Salary, Professional Opportunities, and Schedule to Recruitment by Age, Highest Educational Preparation, Ownership, and Size of Facility

## Appendix J-1

## Importance of Benefits to Recruitment by Selected Characteristics

Table J-1. Importance of benefits to recruitment by age.

| Age | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Estimates |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 20,196 | 20.2 | 47,651 | 47.8 | 29,346 | 29.4 | 2,524 | 2.5 |
| Under 35...... | 21,769 | 100.0 | 3,369 | 15.5 | 11,664 | 53.6 | 6,388 | 29.3 | 349(•) | 1.6(•) |
| 35 to 44...... | 25,253 | 100.0 | 4,902 | 19.4 | 12,006 | 47.5 | 7,898 | 31.3 | 449(•) | 1.8(•) |
| 45 to 54...... | 27,116 | 100.0 | 6,037 | 22.3 | 12,441 | 45.9 | 8,069 | 29.8 | 568(•) | 2.1(•) |
| 55 to 64...... | 21,193 | 100.0 | 4,791 | 22.6 | 9,881 | 46.6 | 5,836 | 27.5 | 686(•) | 3.2(•) |
| 65 and over... | 3,536 | 100.0 | 863(•) | 24.4(•) | 1,370 | 38.7 | 990 | 28.0 | 312(•) | 8.8(•) |
| Unknown....... | 841 | 100.0 | 225(•) | 26.8(•) | 290(•) | 34.4(•) | 167(•) | 19.8(•) | 159(•) | 18.9(•) |
| Standard errors |  |  |  |  |  |  |  |  |  |  |
| Total ... | 3,098 | 0.0 | 1,097 | 1.0 | 2,037 | 1.2 | 1,449 | 1.1 | 399 | 0.4 |
| Under 35...... | 1,224 | 0.0 | 399 | 1.7 | 923 | 2.7 | 628 | 2.4 | 134 | 0.6 |
| 35 to 44...... | 1,264 | 0.0 | 526 | 1.9 | 880 | 2.4 | 874 | 2.2 | 156 | 0.6 |
| 45 to 54...... | 1,492 | 0.0 | 553 | 1.9 | 932 | 2.3 | 828 | 2.3 | 169 | 0.6 |
| 55 to 64...... | 1,251 | 0.0 | 530 | 2.2 | 871 | 2.8 | 593 | 2.4 | 225 | 1.0 |
| 65 and over... | 497 | 0.0 | 216 | 5.6 | 326 | 7.0 | 289 | 6.8 | 121 | 3.4 |
| Unknown....... | 196 | 0.0 | 102 | 10.4 | 87 | 9.6 | 93 | 9.8 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-2. Importance of benefits to recruitment by highest educational preparation.

| Highest preparation | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 20,188 | 20.2 | 47,651 | 47.8 | 29,348 | 29.4 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 3,516 | 16.1 | 10,901 | 49.9 | 6,984 | 32.0 | 444(*) | 2.0(*) |
| Diploma......... | 56,814 | 100.0 | 12,530 | 22.1 | 26,752 | 47.1 | 15,898 | 28.0 | 1,634 | 2.9 |
| Bachelor's in nursing....... | 13,281 | 100.0 | 2,405 | 18.1 | 6,252 | 47.1 | 4,441 | 33.4 | 182(*) | 1.4(*) |
| Other........... | 7,227 | 100.0 | 1,665 | 23.0 | 3,385 | 46.8 | 1,924 | 26.6 | 254(*) | 3.5(*) |
| Unknown........ | 541(*) | 100.0(*) | 72(*) | 13.2(*) | 361(*) | 66.7(*) | 100(*) | 18.5(*) | 9(*) | 1.6(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 1,097 | 1.0 | 2,037 | 1.2 | 1,449 | 1.1 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 417 | 1.8 | 870 | 2.5 | 608 | 2.2 | 139 | 0.6 |
| Diploma......... | 2,255 | 0.0 | 833 | 1.3 | 1,435 | 1.7 | 1,110 | 1.5 | 344 | 0.6 |
| Bachelor's in nursing....... | 1,022 | 0.0 | 340 | 2.5 | 760 | 3.9 | 592 | 3.6 | 76 | 0.6 |
| Other........... | 747 | 0.0 | 310 | 4.0 | 498 | 5.0 | 423 | 4.8 | 138 | 1.9 |
| Unknown........ | 153 | 0.0 | 42 | 7.7 | 125 | 13.4 | 77 | 12.5 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-3. Importance of benefits to recruitment by ownership.

| | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| Ownership | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 20,186 | 20.2 | 47,651 | 47.8 | 29,346 | 29.4 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 13,476 | 23.6 | 26,912 | 47.2 | 15,404 | 27.0 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 5,155 | 16.7 | 14,885 | 48.1 | 9,888 | 32.0 | 996(*) | 3.2(*) |
| Government.... | 11,751 | 100.0 | 1,555 | 13.2 | 5,853 | 49.8 | 4,055 | 34.5 | 288(*) | 2.4(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,097 | 1.0 | 2,037 | 1.2 | 1,449 | 1.1 | 399 | 0.4 |
| Proprietary... | 2,351 | 0.0 | 956 | 1.3 | 1,412 | 1.5 | 995 | 1.4 | 233 | 0.4 |
| Nonprofit..... | 2,631 | 0.0 | 602 | 1.7 | 1,541 | 2.2 | 1,053 | 2.0 | 307 | 0.9 |
| Government.... | 1,560 | 0.0 | 321 | 2.6 | 992 | 4.4 | 723 | 3.9 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-4. Importance of benefits to recruitment by beds available.

| Beds available | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 20,186 | 20.2 | 47,651 | 47.8 | 29,346 | 29.4 | 2,524 | 2.5 |
| 50 or less.... | 8,587 | 100.0 | 1,777 | 20.7 | 4,180 | 48.7 | 2,033 | 23.7 | 597(•) | 7.0(•) |
| 51 to 99...... | 25,133 | 100.0 | 5,963 | 23.7 | 12,534 | 49.9 | 6,162 | 24.5 | 473(•) | 1.9(•) |
| 100 to 149.... | 24,972 | 100.0 | 4,861 | 19.5 | 12,552 | 50.3 | 6,873 | 27.5 | 686(•) | 2.7(•) |
| 150 to 199.... | 16,248 | 100.0 | 3,647 | 22.4 | 7,374 | 45.4 | 4,986 | 30.7 | 242(•) | 1.5(•) |
| 200 and over.. | 24,767 | 100.0 | 3,938 | 15.9 | 11,012 | 44.5 | 9,292 | 37.5 | 526(•) | 2.1(•) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,097 | 1.0 | 2,037 | 1.2 | 1,449 | 1.1 | 399 | 0.4 |
| 50 or less.... | 1,161 | 0.0 | 368 | 3.8 | 716 | 4.2 | 455 | 4.3 | 268 | 2.9 |
| 51 to 99...... | 1,897 | 0.0 | 619 | 2.3 | 1,221 | 2.5 | 744 | 2.0 | 139 | 0.6 |
| 100 to 149.... | 1,621 | 0.0 | 535 | 1.9 | 1,035 | 2.5 | 690 | 2.0 | 179 | 0.7 |
| 150 to 199.... | 1,492 | 0.0 | 557 | 2.4 | 804 | 2.5 | 598 | 2.8 | 87 | 0.5 |
| 200 and over.. | 1,618 | 0.0 | 465 | 1.8 | 1,061 | 2.7 | 857 | 2.5 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-5. Importance of benefits to recruitment by availability of physician's services.

| Physician availability | Total | | Level of importance: Low | | Medium | | High | | Unknown | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 20,186 | 20.2 | 47,651 | 47.8 | 29,346 | 29.4 | 2,524 | 2.5 |
| On premises all times......... | 4,589 | 100.0 | 215(*) | 4.7(*) | 2,282 | 49.7 | 1,730 | 37.7 | 361(*) | 7.9(*) |
| On premises, weekdays..... | 15,708 | 100.0 | 2,212 | 14.1 | 6,916 | 44.0 | 6,153 | 39.2 | 427(*) | 2.7(*) |
| On premises scheduled times.. | 56,562 | 100.0 | 12,108 | 21.4 | 27,831 | 49.2 | 15,293 | 27.0 | 1,329 | 2.4 |
| On call only.. | 14,673 | 100.0 | 3,761 | 25.6 | 6,718 | 45.8 | 3,879 | 26.4 | 314(*) | 2.1(*) |
| Other.......... | 2,498 | 100.0 | 885(*) | 35.4(*) | 869 | 34.8 | 692(*) | 27.7(*) | 53(*) | 2.1(*) |
| Unknown........ | 5,677 | 100.0 | 1,003 | 17.7 | 3,034 | 53.4 | 1,600 | 28.2 | 40(*) | 0.7(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,097 | 1.0 | 2,037 | 1.2 | 1,449 | 1.1 | 399 | 0.4 |
| On premises all times......... | 1,159 | 0.0 | 121 | 2.4 | 731 | 8.3 | 520 | 8.0 | 185 | 3.2 |
| On premises weekdays..... | 1,785 | 0.0 | 412 | 2.4 | 1,012 | 3.5 | 887 | 3.2 | 217 | 1.3 |
| On premises scheduled times.. | 2,774 | 0.0 | 921 | 1.3 | 1,720 | 1.6 | 1,094 | 1.4 | 257 | 0.4 |
| On call only.. | 1,448 | 0.0 | 534 | 2.5 | 744 | 2.9 | 567 | 2.6 | 116 | 0.8 |
| Other.......... | 605 | 0.0 | 245 | 4.5 | 253 | 4.7 | 199 | 4.8 | 53 | 2.1 |
| Unknown........ | 1,010 | 0.0 | 248 | 3.7 | 624 | 4.2 | 335 | 2.9 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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# Appendix J-2

## Importance of Working Conditions to Recruitment by Selected Characteristics

Table J-6. Importance of working conditions to recruitment by age.

| Age | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 16,929 | 17.0 | 48,956 | 49.1 | 31,299 | 31.4 | 2,524 | 2.5 |
| Under 35....... | 21,769 | 100.0 | 2,875 | 13.2 | 11,536 | 53.0 | 7,009 | 32.2 | 349(*) | 1.6(*) |
| 35 to 44...... | 25,253 | 100.0 | 4,290 | 17.0 | 11,594 | 45.9 | 8,919 | 35.3 | 449(*) | 1.8(*) |
| 45 to 54...... | 27,116 | 100.0 | 4,657 | 17.2 | 13,864 | 51.1 | 8,027 | 29.6 | 568(*) | 2.1(*) |
| 55 to 64...... | 21,193 | 100.0 | 4,200 | 19.8 | 10,069 | 47.5 | 6,248 | 29.5 | 686(*) | 3.2(*) |
| 65 and over... | 3,536 | 100.0 | 828(*) | 23.4(*) | 1,509 | 42.7 | 886(*) | 25.1(*) | 312(*) | 8.8(*) |
| Unknown....... | 841 | 100.0 | 78(*) | 9.3(*) | 394(*) | 46.8(*) | 209(*) | 24.9 (*) | 159(*) | 18.9(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,105 | 0.9 | 1,879 | 1.2 | 1,482 | 1.1 | 399 | 0.4 |
| Under 35...... | 1,224 | 0.0 | 387 | 1.7 | 862 | 2.6 | 667 | 2.4 | 134 | 0.6 |
| 35 to 44...... | 1,264 | 0.0 | 472 | 1.8 | 840 | 2.3 | 771 | 2.4 | 156 | 0.6 |
| 45 to 54...... | 1,492 | 0.0 | 610 | 1.9 | 934 | 2.7 | 792 | 2.2 | 169 | 0.6 |
| 55 to 64...... | 1,251 | 0.0 | 558 | 2.3 | 835 | 2.7 | 608 | 2.4 | 225 | 1.0 |
| 65 and over... | 497 | 0.0 | 224 | 5.6 | 336 | 7.1 | 262 | 6.2 | 121 | 3.4 |
| Unknown....... | 196 | 0.0 | 60 | 6.8 | 123 | 11.1 | 89 | 9.4 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-7. Importance of working conditions to recruitment by highest educational preparation.

| Highest preparation | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 16,929 | 17.0 | 48,956 | 49.1 | 31,299 | 31.4 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 3,014 | 13.8 | 11,688 | 53.5 | 6,697 | 30.7 | 444(•) | 2.0(•) |
| Diploma........ | 56,814 | 100.0 | 9,787 | 17.2 | 28,510 | 50.2 | 16,882 | 29.7 | 1,634 | 2.9 |
| Bachelor's in nursing....... | 13,281 | 100.0 | 2,482 | 18.7 | 6,135 | 46.2 | 4,482 | 33.7 | 182(•) | 1.4(•) |
| Other.......... | 7,227 | 100.0 | 1,530 | 21.2 | 2,462 | 34.1 | 2,981 | 41.3 | 254(•) | 3.5(•) |
| Unknown........ | 541(•) | 100.0(•) | 115(•) | 21.3(•) | 161(•) | 29.8(•) | 256(•) | 47.3(•) | 9(•) | 1.6(•) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,105 | 0.9 | 1,879 | 1.2 | 1,482 | 1.1 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 382 | 1.7 | 962 | 2.6 | 570 | 2.3 | 139 | 0.6 |
| Diploma........ | 2,255 | 0.0 | 840 | 1.3 | 1,474 | 1.7 | 1,098 | 1.5 | 344 | 0.6 |
| Bachelor's in nursing....... | 1,022 | 0.0 | 500 | 3.3 | 614 | 3.5 | 555 | 3.2 | 76 | 0.6 |
| Other.......... | 747 | 0.0 | 333 | 4.2 | 362 | 4.7 | 542 | 5.4 | 138 | 1.9 |
| Unknown........ | 153 | 0.0 | 56 | 9.9 | 68 | 11.6 | 125 | 14.4 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-8. Importance of working conditions to recruitment by ownership.

| | | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Low | | Medium | | High | | Unknown | |
| Ownership | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Estimates | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 16,929 | 17.0 | 48,956 | 49.1 | 31,299 | 31.4 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 10,371 | 18.2 | 28,494 | 50.0 | 16,928 | 29.7 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 4,891 | 15.8 | 15,036 | 48.6 | 10,001 | 32.3 | 996(•) | 3.2(•) |
| Government.... | 11,751 | 100.0 | 1,667 | 14.2 | 5,428 | 46.2 | 4,370 | 37.2 | 288(•) | 2.4(•) |
| Standard errors | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,105 | 0.9 | 1,879 | 1.2 | 1,482 | 1.1 | 399 | 0.4 |
| Proprietary... | 2,351 | 0.0 | 830 | 1.2 | 1,435 | 1.5 | 1,062 | 1.4 | 233 | 0.4 |
| Nonprofit..... | 2,631 | 0.0 | 751 | 1.8 | 1,427 | 2.4 | 1,059 | 2.2 | 307 | 0.9 |
| Government.... | 1,560 | 0.0 | 341 | 2.6 | 831 | 3.2 | 703 | 2.7 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-9. Importance of working conditions to recruitment by beds available.

| Beds available | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 16,929 | 17.0 | 48,955 | 49.1 | 31,299 | 31.4 | 2,524 | 2.5 |
| 50 or less.... | 8,587 | 100.0 | 2,264 | 26.4 | 3,832 | 44.6 | 1,893 | 22.0 | 597(•) | 7.0(•) |
| 51 to 99...... | 25,133 | 100.0 | 4,938 | 19.6 | 12,598 | 50.1 | 7,123 | 28.3 | 473(•) | 1.9(•) |
| 100 to 149.... | 24,972 | 100.0 | 3,833 | 15.3 | 13,077 | 52.4 | 7,376 | 29.5 | 686(•) | 2.7(•) |
| 150 to 199.... | 16,248 | 100.0 | 2,422 | 14.9 | 7,620 | 46.9 | 5,964 | 36.7 | 242(•) | 1.5(•) |
| 200 and over.. | 24,767 | 100.0 | 3,471 | 14.0 | 11,828 | 47.8 | 8,942 | 36.1 | 526(•) | 2.1(•) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 1,105 | 0.9 | 1,879 | 1.2 | 1,482 | 1.1 | 399 | 0.4 |
| 50 or less.... | 1,161 | 0.0 | 563 | 5.4 | 654 | 4.7 | 446 | 4.5 | 268 | 2.9 |
| 51 to 99...... | 1,897 | 0.0 | 643 | 1.9 | 1,079 | 2.3 | 755 | 2.0 | 139 | 0.6 |
| 100 to 149.... | 1,621 | 0.0 | 433 | 1.5 | 1,033 | 2.1 | 682 | 2.0 | 179 | 0.7 |
| 150 to 199.... | 1,492 | 0.0 | 348 | 1.7 | 842 | 3.0 | 734 | 2.8 | 87 | 0.5 |
| 200 and over.. | 1,618 | 0.0 | 497 | 1.8 | 930 | 2.5 | 859 | 2.2 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-10. Importance of working conditions to recruitment by availability of physician's services.

| Physician availability | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 16,929 | 17.0 | 48,956 | 49.1 | 31,299 | 31.4 | 2,524 | 2.5 |
| On premises all times......... | 4,589 | 100.0 | 357(*) | 7.8(*) | 2,218 | 48.3 | 1,653 | 36.0 | 361(*) | 7.9(?*) |
| On premises, weekdays...... | 15,708 | 100.0 | 1,909 | 12.2 | 6,697 | 42.6 | 6,675 | 42.5 | 427(*) | 2.7(*) |
| On premises scheduled times.. | 56,562 | 100.0 | 10,388 | 18.4 | 28,575 | 50.5 | 16,269 | 28.8 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 2,846 | 19.4 | 7,466 | 50.9 | 4,046 | 27.6 | 314(*) | 2.1(*) |
| Other.......... | 2,498 | 100.0 | 435(*) | 17.4(*) | 1,328 | 53.2 | 683(*) | 27.3(*) | 53(*) | 2.1(*) |
| Unknown........ | 5,677 | 100.0 | 996 | 17.5 | 2,671 | 47.0 | 1,973 | 34.7 | 40(*) | 0.7(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,105 | 0.9 | 1,879 | 1.2 | 1,482 | 1.1 | 399 | 0.4 |
| On premises all times......... | 1,159 | 0.0 | 220 | 4.4 | 655 | 6.4 | 472 | 6.4 | 185 | 3.2 |
| On premises weekdays...... | 1,785 | 0.0 | 381 | 2.1 | 949 | 3.2 | 928 | 3.2 | 217 | 1.3 |
| On premises scheduled times.. | 2,774 | 0.0 | 959 | 1.3 | 1,553 | 1.6 | 1,'18 | 1.4 | 257 | 0.4 |
| On call only.. | 1,448 | 0.0 | 451 | 2.4 | 881 | 2.7 | 613 | 2.4 | 116 | 0.8 |
| Other.......... | 605 | 0.0 | 156 | 5.5 | 447 | 8.7 | 209 | 6.9 | 53 | 2.1 |
| Unknown........ | 1,010 | 0.0 | 274 | 3.3 | 513 | 4.3 | 439 | 4.6 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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# Appendix J-3

## Importance of Salary to Recruitment

Table J-11. Importance of salary to recruitment by age.

| Age | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 15,262 | 15.3 | 18,373 | 18.4 | 63,549 | 63.7 | 2,524 | 2.5 |
| Under 35...... | 21,769 | 100.0 | 2,786 | 12.8 | 4,180 | 19.2 | 14,455 | 66.4 | 349(*) | 1.6(*) |
| 35 to 44...... | 25,253 | 100.0 | 3,574 | 14.2 | 4,622 | 18.3 | 16,608 | 65.8 | 449(*) | 1.8(*) |
| 45 to 54...... | 27,116 | 100.0 | 4,287 | 15.8 | 4,986 | 18.4 | 17,274 | 63.7 | 568(*) | 2.1(*) |
| 55 to 64...... | 21,193 | 100.0 | 3,969 | 18.7 | 3,773 | 17.8 | 12,765 | 60.2 | 686(*) | 3.2(*) |
| 65 and over... | 3,536 | 100.0 | 587(*) | 16.6(*) | 569(*) | 16.1(*) | 2,067 | 58.5 | 312(*) | 8.8(*) |
| Unknown....... | 841 | 100.0 | 58(*) | 6.9(*) | 244(*) | 29.0(*) | 380(*) | 45.2(*) | 159(*) | 18.9(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 910 | 0.8 | 1,113 | 1.0 | 2,463 | 1.2 | 399 | 0.4 |
| Under 35...... | 1,224 | 0.0 | 367 | 1.6 | 505 | 2.0 | 955 | 2.3 | 134 | 0.6 |
| 35 to 44...... | 1,264 | 0.0 | 418 | 1.6 | 544 | 1.9 | 1,019 | 2.3 | 156 | 0.6 |
| 45 to 54...... | 1,492 | 0.0 | 489 | 1.7 | 553 | 1.9 | 1,267 | 2.4 | 169 | 0.6 |
| 55 to 64...... | 1,251 | 0.0 | 463 | 2.0 | 479 | 2.0 | 946 | 2.6 | 225 | 1.0 |
| 65 and over... | 497 | 0.0 | 155 | 4.3 | 178 | 4.7 | 423 | 6.8 | 121 | 3.4 |
| Unknown....... | 198 | 0.0 | 58 | 6.6 | 99 | 9.9 | 115 | 11.3 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-12. Importance of salary to recruitment by highest educational preparation.

| Highest preparation | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 15,262 | 15.3 | 18,373 | 18.4 | 63,549 | 63.7 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 2,775 | 12.7 | 3,775 | 17.3 | 14,849 | 68.0 | 444(*) | 2.0(*) |
| Diploma........ | 56,814 | 100.0 | 8,935 | 15.7 | 11,324 | 19.9 | 34,921 | 61.5 | 1,634 | 2.9 |
| Bachelor's in nursing....... | 13,281 | 100.0 | 1,953 | 14.7 | 2,063 | 15.5 | 9,083 | 68.4 | 184(*) | 1.4(*) |
| Other.......... | 7,227 | 100.0 | 1,530 | 21.2 | 1,075 | 14.9 | 4,368 | 60.4 | 254(*) | 3.5(*) |
| Unknown........ | 541(*) | 100.0(*) | 69(*) | 12.8(*) | 136(*) | 25.1(*) | 328(*) | 60.6(*) | 9(*) | 1.6(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 910 | 0.8 | 1,113 | 1.0 | 2,463 | 1.2 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 338 | 1.5 | 439 | 1.8 | 1,031 | 2.3 | 139 | 0.6 |
| Diploma........ | 2,255 | 0.0 | 702 | 1.1 | 823 | 1.2 | 1,728 | 1.5 | 344 | 0.6 |
| Bachelor's in nursing....... | 1,022 | 0.0 | 325 | 2.4 | 365 | 2.6 | 898 | 3.3 | 78 | 0.6 |
| Other.......... | 747 | 0.0 | 343 | 4.2 | 281 | 3.6 | 577 | 4.9 | 138 | 1.9 |
| Unknown........ | 153 | 0.0 | 41 | 7.5 | 85 | 13.1 | 120 | 13.8 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-13. Importance of salary to recruitment by ownership.

| Ownership | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 15,262 | 15.3 | 18,373 | 18.4 | 63,549 | 63.7 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 9,658 | 16.9 | 10,494 | 18.4 | 35,640 | 62.5 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 4,452 | 14.4 | 5,676 | 18.4 | 19,800 | 64.0 | 996(*) | 3.2(*) |
| Government.... | 11,751 | 100.0 | 1,151 | 9.8 | 2,203 | 18.7 | 8,109 | 69.0 | 288(*) | 2.4(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 910 | 0.8 | 1,113 | 1.0 | 2,463 | 1.2 | 399 | 0.4 |
| Proprietary... | 2,351 | 0.0 | 751 | 1.1 | 750 | 1.1 | 1,687 | 1.4 | 233 | 0.4 |
| Nonprofit..... | 2,631 | 0.0 | 579 | 1.6 | 815 | 2.3 | 1,975 | 2.7 | 307 | 0.9 |
| Government.... | 1,560 | 0.0 | 236 | 2.0 | 441 | 2.8 | 1,215 | 3.4 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-14. Importance of salary to recruitment by beds available.

| Beds available | Total |  | Level of importance: Low |  | Medium |  | High |  | Unknown |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 15,262 | 15.3 | 18,373 | 18.4 | 63,549 | 63.7 | 2,524 | 2.5 |
| 50 or less.... | 8,587 | 100.0 | 1,999 | 23.3 | 1,913 | 22.3 | 4,078 | 47.5 | 597(•) | 7.0(•) |
| 51 to 99...... | 25,133 | 100.0 | 4,460 | 17.7 | 4,204 | 16.7 | 15,995 | 63.6 | 473(•) | 1.9(•) |
| 100 to 149.... | 24,972 | 100.0 | 3,676 | 14.7 | 4,585 | 18.4 | 16,026 | 64.2 | 686(•) | 2.7(•) |
| 150 to 199.... | 16,248 | 100.0 | 2,174 | 13.4 | 3,083 | 19.0 | 10,749 | 66.2 | 242(•) | 1.5(•) |
| 200 and over.. | 24,767 | 100.0 | 2,953 | 11.9 | 4,588 | 18.5 | 16,701 | 67.4 | 526(•) | 2.1(•) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 910 | 0.9 | 1,113 | 1.0 | 2,463 | 1.2 | 399 | 0.4 |
| 50 or less.... | 1,161 | 0.0 | 438 | 4.1 | 615 | 6.1 | 670 | 5.6 | 268 | 2.9 |
| 51 to 99...... | 1,897 | 0.0 | 540 | 2.0 | 491 | 1.9 | 1,608 | 2.8 | 139 | 0.6 |
| 100 to 149.... | 1,621 | 0.0 | 391 | 1.4 | 458 | 1.5 | 1,242 | 2.1 | 179 | 0.7 |
| 150 to 199.... | 1,492 | 0.0 | 363 | 1.7 | 447 | 2.1 | 1,068 | 2.8 | 87 | 0.5 |
| 200 and over.. | 1,618 | 0.0 | 376 | 1.4 | 537 | 1.8 | 1,246 | 2.1 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-15. Importance of salary to recruitment by availability of physician's services.

| Physician availability | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 15,262 | 15.3 | 18,373 | 18.4 | 63,549 | 63.7 | 2,524 | 2.5 |
| On premises all times........ | 4,589 | 100.0 | 301(•) | 6.6(•) | 894(•) | 19.5(•) | 3,034 | 66.1 | 361(•) | 7.9(•) |
| On premises weekdays..... | 15,708 | 100.0 | 1,820 | 11.6 | 2,459 | 15.7 | 11,003 | 70.0 | 427(•) | 2.7(•) |
| On premises scheduled times.. | 56,562 | 100.0 | 8,924 | 15.8 | 9,988 | 17.7 | 36,321 | 64.2 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 2,913 | 19.9 | 2,734 | 18.6 | 8,712 | 59.4 | 314(•) | 2.1(•) |
| Other......... | 2,498 | 100.0 | 573(•) | 22.9(•) | 507(•) | 20.3(•) | 1,366 | 54.7 | 53 | 2.1(•) |
| Unknown....... | 5,677 | 100.0 | 732(•) | 12.9(•) | 1,792 | 31.6 | 3,113 | 54.8 | 40(•) | 0.7(•) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 910 | 0.8 | 1,113 | 1.0 | 2,463 | 1.2 | 399 | 0.4 |
| On premises all times........ | 1,159 | 0.0 | 135 | 2.7 | 333 | 5.3 | 807 | 5.7 | 185 | 3.2 |
| On premises weekdays..... | 1,785 | 0.0 | 381 | 2.0 | 446 | 2.3 | 1,364 | 3.1 | 217 | 1.3 |
| On premises scheduled times.. | 2,774 | 0.0 | 738 | 1.1 | 749 | 1.1 | 2,124 | 1.6 | 257 | 0.4 |
| On call only.. | 1,448 | 0.0 | 435 | 2.2 | 421 | 2.2 | 989 | 3.2 | 116 | 0.8 |
| Other......... | 605 | 0.0 | 198 | 5.3 | 190 | 5.5 | 361 | 6.7 | 53 | 2.1 |
| Unknown....... | 1,010 | 0.0 | 232 | 3.6 | 618 | 7.5 | 567 | 7.0 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

## Appendix J-4

## Importance of Professional Opportunities to Recruitment by Selected Characteristics

Table J-16. Importance of professional opportunities to recruitment by age.

| | | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | Low | | Medium | | High | | Unknown | |
| Age | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Estimates | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 23,671 | 23.7 | 45,933 | 46.1 | 27,579 | 27.7 | 2,524 | 2.5 |
| Under 35...... | 21,769 | 100.0 | 3,809 | 17.5 | 10,654 | 48.9 | 6,958 | 32.0 | 349(•) | 1.6(•) |
| 35 to 44...... | 25,253 | 100.0 | 6,259 | 24.8 | 10,570 | 41.9 | 7,974 | 31.6 | 449(•) | 1.8(•) |
| 45 to 54...... | 27,116 | 100.0 | 6,937 | 25.6 | 12,473 | 46.0 | 7,138 | 26.3 | 568(•) | 2.1(•) |
| 55 to 64...... | 21,193 | 100.0 | 5,438 | 25.7 | 10,404 | 49.1 | 4,665 | 22.0 | 686(•) | 3.2(•) |
| 65 and over... | 3,536 | 100.0 | 1,080 | 30.5 | 1,405 | 39.7 | 738(•) | 20.9(•) | 312(•) | 8.8(•) |
| Unknown....... | 841 | 100.0 | 148(•) | 17.6(•) | 428(•) | 50.9(•) | 105(•) | 12.5(•) | 159(•) | 18.9(•) |
| Standard errors | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,203 | 1.0 | 2,025 | 1.2 | 1,334 | 1.1 | 399 | 0.4 |
| Under 35...... | 1,224 | 0.0 | 431 | 1.9 | 842 | 2.5 | 643 | 2.3 | 134 | 0.6 |
| 35 to 44...... | 1,264 | 0.0 | 610 | 2.1 | 846 | 2.4 | 650 | 2.2 | 156 | 0.6 |
| 45 to 54...... | 1,492 | 0.0 | 632 | 2.1 | 948 | 2.3 | 739 | 2.1 | 169 | 0.6 |
| 55 to 64...... | 1,251 | 0.0 | 532 | 2.2 | 920 | 2.8 | 520 | 2.2 | 225 | 1.0 |
| 65 and over... | 497 | 0.0 | 256 | 6.3 | 317 | 7.0 | 272 | 6.6 | 121 | 3.4 |
| Unknown....... | 196 | 0.0 | 79 | 8.7 | 122 | 11.2 | 73 | 8.1 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-17. Importance of professional opportunities to recruitment by highest educational preparation.

| Highest preparation | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 23,671 | 23.7 | 45,933 | 46.1 | 27,579 | 27.7 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 4,589 | 21.0 | 9,828 | 45.0 | 6,981 | 32.0 | 444(•) | 2.0(•) |
| Diploma........ | 56,814 | 100.0 | 15,239 | 26.8 | 26,413 | 46.5 | 13,529 | 23.8 | 1,634 | 2.9 |
| Bachelor's in nursing....... | 13,281 | 100.0 | 2,114 | 15.9 | 6,193 | 46.6 | 4,791 | 36.1 | 182(•) | 1.4(•) |
| Other.......... | 7,227 | 100.0 | 1,618 | 22.4 | 3,251 | 45.0 | 2,104 | 29.1 | 254(•) | 3.5(•) |
| Unknown........ | 541(•) | 100.0(•) | 110(•) | 20.4(•) | 248(•) | 45.8(•) | 174(•) | 32.2(•) | 9(•) | 1.6(•) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,203 | 1.0 | 2,025 | 1.2 | 1,334 | 1.1 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 460 | 1.9 | 819 | 2.4 | 604 | 2.2 | 139 | 0.6 |
| Diploma........ | 2,255 | 0.0 | 984 | 1.4 | 1,388 | 1.6 | 977 | 1.4 | 344 | 0.6 |
| Bachelor's in nursing....... | 1,022 | 0.0 | 297 | 2.2 | 744 | 3.8 | 603 | 3.6 | 76 | 0.6 |
| Other.......... | 747 | 0.0 | 335 | 4.2 | 523 | 5.3 | 402 | 4.7 | 138 | 1.9 |
| Unknown........ | 153 | 0.0 | 53 | 9.6 | 105 | 14.1 | 98 | 14.1 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-18. Importance of professional opportunities to recruitment by ownership.

| Ownership | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 23,671 | 23.7 | 45,933 | 46.1 | 27,579 | 27.7 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 15,001 | 26.3 | 25,623 | 44.9 | 15,169 | 26.6 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 6,690 | 21.6 | 14,057 | 45.5 | 9,181 | 29.7 | 996(*) | 3.2(*) |
| Government.... | 11,751 | 100.0 | 1,980 | 16.8 | 6,254 | 53.2 | 3,230 | 27.5 | 288(*) | 2.4(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,203 | 1.0 | 2,025 | 1.2 | 1,334 | 1.1 | 399 | 0.4 |
| Proprietary... | 2,351 | 0.0 | 1,007 | 1.3 | 1,345 | 1.5 | 984 | 1.3 | 233 | 0.4 |
| Nonprofit..... | 2,631 | 0.0 | 764 | 2.0 | 1,488 | 2.3 | 1,009 | 2.1 | 307 | 0.9 |
| Government.... | 1,560 | 0.0 | 353 | 2.7 | 1,095 | 4.4 | 525 | 3.2 | 124 | 1.0 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-19. Importance of professional opportunities to recruitment by beds available.

| Beds available | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 23,671 | 23.7 | 45,933 | 46.1 | 27,579 | 27.7 | 2,524 | 2.5 |
| 50 or less.... | 8,587 | 100.0 | 2,253 | 26.2 | 3,910 | 45.5 | 1,827 | 21.3 | 597(*) | 7.0(*) |
| 51 to 99...... | 25,133 | 100.0 | 6,889 | 27.4 | 11,806 | 47.0 | 5,964 | 23.7 | 473(*) | 1.9(*) |
| 100 to 149.... | 24,972 | 100.0 | 5,657 | 22.7 | 12,510 | 50.1 | 6,120 | 24.5 | 686(*) | 2.7(*) |
| 150 to 199.... | 16,248 | 100.0 | 3,994 | 24.6 | 7,275 | 44.8 | 4,738 | 29.2 | 242(*) | 1.5(*) |
| 200 and over.. | 24,767 | 100.0 | 4,878 | 19.7 | 10,432 | 42.1 | 8,931 | 36.1 | 526(*) | 2.1(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 1,203 | 1.0 | 2,025 | 1.2 | 1,334 | 1.1 | 399 | 0.4 |
| 50 or less.... | 1,161 | 0.0 | 484 | 4.0 | 667 | 4.8 | 381 | 3.9 | 268 | 2.9 |
| 51 to 99...... | 1,897 | 0.0 | 660 | 2.4 | 1,188 | 2.3 | 687 | 1.8 | 139 | 0.6 |
| 100 to 149.... | 1,621 | 0.0 | 577 | 1.9 | 1,080 | 2.4 | 567 | 1.9 | 179 | 0.7 |
| 150 to 199.... | 1,492 | 0.0 | 568 | 2.5 | 773 | 2.8 | 616 | 2.6 | 87 | 0.5 |
| 200 and over.. | 1,618 | 0.0 | 541 | 1.9 | 1,048 | 2.8 | 615 | 2.5 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-20. Importance of professional opportunities to recruitment by availability of physician's services.

| Physician availability | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 23,671 | 23.7 | 45,933 | 46.1 | 27,579 | 27.7 | 2,524 | 2.5 |
| On premises all times......... | 4,589 | 100.0 | 254(*) | 5.5(*) | 2,137 | 46.6 | 1,837 | 40.0 | 361(*) | 7.9(*) |
| On premises weekdays...... | 15,708 | 100.0 | 2,704 | 17.2 | 7,183 | 45.7 | 5,394 | 34.3 | 427(*) | 2.7(*) |
| On premises scheduled times.. | 56,562 | 100.0 | 14,572 | 25.8 | 26,646 | 47.1 | 14,015 | 24.8 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 3,949 | 26.9 | 6,511 | 44.4 | 3,899 | 26.6 | 314(*) | 2.1(*) |
| Other.......... | 2,498 | 100.0 | 906 | 36.3 | 950 | 38.0 | 590(*) | 23.6(*) | 53(*) | 2.1(*) |
| Unknown........ | 5,677 | 100.0 | 1,287 | 22.7 | 2,507 | 44.1 | 1,844 | 32.5 | 40(*) | 0.7(*) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 1,203 | 1.0 | 2,025 | 1.2 | 1,334 | 1.1 | 399 | 0.4 |
| On premises all times......... | 1,159 | 0.0 | 126 | 2.6 | 749 | 9.3 | 545 | 8.8 | 185 | 3.2 |
| On premises weekdays...... | 1,786 | 0.0 | 465 | 2.6 | 1,089 | 3.9 | 762 | 3.1 | 217 | 1.3 |
| On premises scheduled times.. | 2,774 | 0.0 | 1,043 | 1.4 | 1,648 | 1.5 | 947 | 1.2 | 257 | 0.4 |
| On call only.. | 1,448 | 0.0 | 530 | 2.3 | 719 | 2.7 | 545 | 2.4 | 116 | 0.8 |
| Other.......... | 605 | 0.0 | 253 | 4.4 | 298 | 6.9 | 205 | 6.3 | 53 | 2.1 |
| Unknown........ | 1,010 | 0.0 | 311 | 3.4 | 562 | 4.8 | 412 | 5.6 | 34 | 0.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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## Appendix J-5

## Importance of Schedule to Recruitment by Selected Characteristics

Table J-21. Importance of schedule to recruitment by age.

| Age | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 28,959 | 29.0 | 37,931 | 38.0 | 30,294 | 30.4 | 2,524 | 2.5 |
| Under 35...... | 21,769 | 100.0 | 6,421 | 29.5 | 9,291 | 42.7 | 5,708 | 26.2 | 349(*) | 1.8(*) |
| 35 to 44...... | 25,253 | 100.0 | 6,833 | 27.1 | 10,141 | 40.2 | 7,829 | 31.0 | 449(*) | 1.8(*) |
| 45 to 54...... | 27,116 | 100.0 | 7,358 | 27.1 | 9,984 | 36.8 | 9,206 | 34.0 | 568(*) | 2.1(*) |
| 55 to 64...... | 21,193 | 100.0 | 6,415 | 30.3 | 7,530 | 35.5 | 6,562 | 31.0 | 686(*) | 3.2(*) |
| 65 and over... | 3,536 | 100.0 | 1,677 | 47.4 | 733(*) | 20.7(*) | 813(*) | 23.0(*) | 312(*) | 8.8(*) |
| Unknown....... | 841 | 100.0 | 254(*) | 30.3(*) | 251(*) | 29.9(*) | 176(*) | 20.9(*) | 159(*) | 18.9(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,370 | 1.2 | 1,847 | 1.3 | 1,527 | 1.2 | 399 | 0.4 |
| Under 35...... | 1,224 | 0.0 | 615 | 2.3 | 761 | 2.5 | 566 | 2.2 | 134 | 0.6 |
| 35 to 44...... | 1,264 | 0.0 | 652 | 2.2 | 766 | 2.4 | 669 | 2.2 | 156 | 0.6 |
| 45 to 54...... | 1,492 | 0.0 | 610 | 2.1 | 1041 | 2.8 | 834 | 2.5 | 169 | 0.6 |
| 55 to 64...... | 1,251 | 0.0 | 663 | 2.6 | 717 | 2.7 | 716 | 2.7 | 225 | 1.0 |
| 65 and over... | 497 | 0.0 | 367 | 7.3 | 237 | 5.9 | 226 | 5.8 | 121 | 3.4 |
| Unknown....... | 198 | 0.0 | 95 | 10.0 | 103 | 10.2 | 84 | 9.1 | 102 | 10.3 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-22. Importance of schedule to recruitment by the nurse's highest educational preparation.

| Highest preparation | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 28,959 | 29.0 | 37,931 | 38.0 | 30,294 | 30.4 | 2,524 | 2.5 |
| Associate degree | 21,843 | 100.0 | 6,489 | 29.7 | 8,276 | 37.9 | 6,635 | 30.4 | 444(•) | 2.0(•) |
| Diploma........ | 56,814 | 100.0 | 16,183 | 28.5 | 21,260 | 37.4 | 17,737 | 31.2 | 1,634 | 2.9 |
| Bachelor's in nursing....... | 13,281 | 100.0 | 4,171 | 31.4 | 5,218 | 39.3 | 3,709 | 27.9 | 182(•) | 1.4(•) |
| Other.......... | 7,227 | 100.0 | 1,880 | 26.0 | 2,933 | 40.6 | 2,161 | 29.9 | 254(•) | 3.5(•) |
| Unknown........ | 541(•) | 100.0(•) | 236(•) | 43.6(•) | 245(•) | 45.3(•) | 52(•) | 9.6(•) | 9(•) | 1.6(•) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,370 | 1.2 | 1,847 | 1.3 | 1,527 | 1.2 | 399 | 0.4 |
| Associate degree | 1,205 | 0.0 | 579 | 2.2 | 862 | 2.3 | 714 | 2.6 | 139 | 0.6 |
| Diploma........ | 2,255 | 0.0 | 1,023 | 1.5 | 1,326 | 1.7 | 1,168 | 1.6 | 344 | 0.6 |
| Bachelor's in nursing....... | 1,022 | 0.0 | 551 | 3.4 | 674 | 3.7 | 473 | 3.1 | 78 | 0.6 |
| Other.......... | 747 | 0.0 | 286 | 3.8 | 494 | 5.0 | 447 | 5.0 | 138 | 1.9 |
| Unknown........ | 153 | 0.0 | 236 | 14.0 | 111 | 14.3 | 31 | 5.8 | 9 | 1.6 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-23. Importance of schedule to recruitment by ownership.

| Ownership | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 28,959 | 29.0 | 37,931 | 38.0 | 30,294 | 30.4 | 2,524 | 2.5 |
| Proprietary... | 57,033 | 100.0 | 18,060 | 31.7 | 20,221 | 35.5 | 17,511 | 30.7 | 1,240 | 2.2 |
| Nonprofit..... | 30,924 | 100.0 | 7,759 | 25.1 | 12,967 | 41.9 | 9,202 | 29.8 | 996(•) | 3.2(•) |
| Government.... | 11,751 | 100.0 | 3,139 | 26.7 | 4,743 | 40.4 | 3,581 | 30.5 | 288(•) | 2.4(•) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,370 | 1.2 | 1,847 | 1.3 | 1,527 | 1.2 | 399 | 0.4 |
| Proprietary... | 2,351 | 0.0 | 1,133 | 1.5 | 1,116 | 1.4 | 1,148 | 1.4 | 233 | 0.4 |
| Nonprofit..... | 2,631 | 0.0 | 845 | 2.2 | 1,524 | 2.7 | 1,051 | 2.4 | 307 | 0.9 |
| Government.... | 1,580 | 0.0 | 546 | 3.2 | 783 | 3.7 | 638 | 3.6 | 121 | 1.0 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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Table J-24. Importance of schedule to recruitment by beds available.

| Beds available | Total | | Level of importance | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Low | | Medium | | High | | Unknown | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** | | | | | | | | | | |
| Total.... | 99,707 | 100.0 | 28,959 | 29.0 | 37,931 | 38.0 | 30,294 | 30.4 | 2,524 | 2.5 |
| 50 or less.... | 8,587 | 100.0 | 2,824 | 32.9 | 2,893 | 33.7 | 2,273 | 26.5 | 597(*) | 7.0(*) |
| 51 to 99...... | 25,133 | 100.0 | 8,126 | 32.3 | 9,555 | 38.0 | 6,978 | 27.8 | 473(*) | 1.9(*) |
| 100 to 149.... | 24,972 | 100.0 | 7,686 | 30.8 | 9,254 | 37.1 | 7,346 | 29.4 | 686(*) | 2.7(*) |
| 150 to 199.... | 16,248 | 100.0 | 4,019 | 24.7 | 6,505 | 40.0 | 5,482 | 33.7 | 242(*) | 1.5(*) |
| 200 and ov r.. | 24,767 | 100.0 | 6,303 | 25.4 | 9,724 | 39.3 | 8,214 | 33.2 | 526(*) | 2.1(*) |
| **Standard errors** | | | | | | | | | | |
| Total.... | 3,098 | 0.0 | 1,370 | 1.2 | 1,847 | 1.3 | 1,527 | 1.2 | 399 | 0.4 |
| 50 or less.... | 1,161 | 0.0 | 537 | 5.2 | 727 | 6.4 | 448 | 4.2 | 268 | 2.9 |
| 51 to 99...... | 1,897 | 0.0 | 712 | 2.6 | 1,112 | 2.6 | 867 | 2.5 | 139 | 0.6 |
| 100 to 149.... | 1,621 | 0.0 | 778 | 2.4 | 804 | 2.2 | 728 | 2.2 | 179 | 0.7 |
| 150 to 199.... | 1,492 | 0.0 | 526 | 2.7 | 738 | 2.5 | 717 | 2.8 | 87 | 0.5 |
| 200 and over.. | 1,618 | 0.0 | 648 | 2.0 | 929 | 2.6 | 779 | 2.5 | 172 | 0.7 |

SOURCE: 1985 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: * This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

Table J-25. Importance of schedule to recruitment by availability of physician's services.

| Physician availability | Total |  | Level of importance |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | Low |  | Medium |  | High |  | Unknown |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Estimates** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 99,707 | 100.0 | 28,959 | 29.0 | 37,931 | 38.0 | 30,294 | 30.4 | 2,524 | 2.5 |
| On premises all times........ | 4,589 | 100.0 | 1,006(•) | 21.9(•) | 1,948 | 42.5 | 1,274(•) | 27.8(•) | 361(•) | 7.9(•) |
| On premises weekdays..... | 15,708 | 100.0 | 3,730 | 23.7 | 5,636 | 35.9 | 5,916 | 37.7 | 427(•) | 2.7(•) |
| On premises scheduled times.. | 56,562 | 100.0 | 16,238 | 28.7 | 22,642 | 40.0 | 16,353 | 28.9 | 1,329 | 2.3 |
| On call only.. | 14,673 | 100.0 | 5,771 | 39.3 | 4,240 | 28.9 | 4,348 | 29.6 | 314(•) | 2.1(•) |
| Other......... | 2,498 | 100.0 | 899 | 36.0 | 695(•) | 27.8(•) | 852(•) | 34.1(•) | 53(•) | 2.1(•) |
| Unknown....... | 5,677 | 100.0 | 1,315 | 23.2 | 2,771 | 48.8 | 1,551 | 27.3 | 40(•) | 0.7(•) |
| **Standard errors** |  |  |  |  |  |  |  |  |  |  |
| Total.... | 3,098 | 0.0 | 1,370 | 1.2 | 1,847 | 1.3 | 1,527 | 1.2 | 399 | 0.4 |
| On premises all times........ | 1,159 | 0.0 | 428 | 7.4 | 639 | 7.9 | 424 | 7.6 | 185 | 3.2 |
| On premises weekdays..... | 1,785 | 0.0 | 582 | 2.5 | 836 | 3.2 | 832 | 3.4 | 217 | 1.3 |
| On premises scheduled times.. | 2,774 | 0.0 | 1,061 | 1.6 | 1,514 | 1.6 | 1,196 | 1.5 | 257 | 0.4 |
| On call only.. | 1,448 | 0.0 | 770 | 3.3 | 527 | 2.6 | 629 | 2.9 | 116 | 0.8 |
| Other......... | 605 | 0.0 | 254 | 5.2 | 201 | 5.8 | 299 | 7.2 | 53 | 2.1 |
| Unknown....... | 1,010 | 0.0 | 299 | 4.2 | 724 | 6.9 | 327 | 4.8 | 34 | 0.6 |

SOURCE: 1986 National Nursing Home Survey

POPULATION: RNs in the contiguous 48 states and DC who were on the facility's regular payroll (excludes nurses employed through contracts and temporary employment services).

NOTE: • This estimate is unstable because the relative standard error is more than 30 percent or the sample size is less than 25.

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